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PROBLEMS OF POPULATION AND PARENTHOOD

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Hmd.
London, 1920
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PROBLEMS OF POPULATION AND PARENTHOOD

National Council of Public Morals

[*Being the Second Report of and the chief evidence taken by the National Birth-rate Commission, 1918–1920.*]

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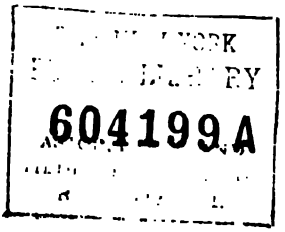
1920



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INTRODUCTION

THE National Birth-rate Commission began its labours on October 24, 1913, and presented its first Report, and the evidence taken, to the Rt. Hon. Walter Long, M.P., President of the Local Government Board, on June 28, 1916. In thanking the members of the Commission, who gave their time and labour for two and a half years to this national service, Mr. Long said—

"My first duty—and a very great privilege it is—is on behalf of the Government and on behalf—may I for a moment voice something much wider and much larger than the Government?—on behalf of society in the country, to thank your Commission for the splendid work which you have done. . . . I am confident that, if you have done nothing else—and I think you have done a great deal more—you have stirred the minds and hearts of men in so profound a way that even the most careless, the most indifferent, cannot be deaf to your entreaties or regardless of your suggestions. . . .

"If the need for work of this kind were great before, it is ten times greater now that this war has come. I hope that the important remark made to us a moment ago may be appreciated by the people of this nation throughout its length and breadth—namely, that true patriotism and true devotion to public service are not to be found merely in the performance of those splendid feats of arms which have won the gratitude of our hearts and which have won our undying admiration, but they are also to be found in those quieter, less glorious, but none the less valuable services which we

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can, if we will, in our time and generation, render to the State, by advocating and pressing with all our might for reforms such as those which you have come here to advocate to-day, and which, if they are carried into effect, will have the result of building up our nation and enabling us at no very distant time to recover from the great blow which we have suffered as a people from this terrible conflict."

The Report was published in Britain and America, and it had a very wide circulation. It was almost unanimously received by the Press—to quote the words in the review of Mr. Sidney Webb in *The New Statesman* —as "the most candid, the most outspoken and the most important statement that this country has yet had as to the extent, the nature and the ethical character of the voluntary regulation of the marriage state which now prevails over the greater part of the civilised world."

It is not practicable, as the present Report already exceeds its limited space, to recapitulate here the findings of the previous Report,[1] but it is essential to a complete understanding of the present one that the reader should know the ground already covered.

The origin of the reconstituted Commission, whose work is now presented to the nation, is quickly told. The words of Mr. Long pointed to other problems upon which further inquiry might throw more light; and after the first Report was published there was a general and persistent demand from numerous quarters that the Commission, in view of the effects of the Great War upon vital problems of population, should not be disbanded, but should be induced to continue its voluntary

[1] A few copies still remain, and may be obtained from the publishers or the Secretary of the National Birth-rate Commission, 60 Gower Street, W.C. 1.

labours. A resolution to this effect was unanimously carried at the Caxton Hall Conference on "Marriage and Parenthood" in March 1918, which was attended by representative religious, social and scientific workers from various parts of the country. The National Council of Public Morals could not resist this strong appeal to reconstitute the Commission, and accordingly, after consulting statistical, educational and scientific experts, it resolved to continue the inquiry as its contribution to the work of national and racial reconstruction.

The terms of reference to the reconstituted Commission were as follows—

Terms of Reference

To consider—

1. The extreme and persistent fall of the legitimate birth-rate in the United Kingdom, and the causes and prevention of the illegitimate birth-rate.

2. The influence of ante-natal (fœtal) disease and death in the decline of the birth-rate, and the causes of fœtal death during labour at or near full term.

3. The contemporary movements of population in the Dominions, and the proportional distribution of the sexes throughout the Empire.

4. The economic problems of parenthood in view of the rise of prices and taxation and their possible solutions.

5. The housing problems in relation to parenthood.

6. The present spread of venereal disease, the chief cause of sterility and degeneracy, and the further menace of these diseases during demobilisation.

7. The increased industrial employment of women of child-bearing age.

8. The differential or qualitative aspects of the present birth-rate.

9. The constitution and uses of the coming Ministry of Health as an instrument of racial reconstruction.

10. The need of a census immediately after the war, and of a permanent anthropometric department in the Ministry of Health.

The reconstituted Commission was made, as in the previous one, unusually large, in order to allow for absences due to war and health. The following is the list of its members—

The Lord Bishop of Birmingham (President).
Dr. Mary Scharlieb, C.B.E., M.S. (Vice-President).
Rev. Principal A. E. Garvie, M.A., D.D. (Vice-President).
Dr. C. W. Saleeby, F.R.S.Ed. (Chairman of Committee).
The Duchess of Marlborough.
The Countess of Selborne.
Lady Willoughby de Broke.
Sybil, Viscountess Rhondda.
Lieut.-Col. Prof. Sir G. Sims Woodhead, R.A.M.C., LL.D., F.R.S.Ed.
Sir Edward Brabrook, C.B. (Chairman Child Study Society).
Sir Rider Haggard, K.B.E.
Mrs. General Booth.
Mrs. H. A. L. Fisher.
Mrs. Mary H. Clay (representing the Mothers' Union).
Miss Michelmore (representing National Federation of Women Workers).
Mrs. Walter Runciman.
Dr. Marie C. Stopes, D.Sc., Ph.D., F.L.S.
Miss A. L. Broome (representing the National Union of Teachers).
Lord Willoughby de Broke.
Dr. T. H. C. Stevenson (Superintendent of Statistics for the Registrar-General).
Dr. J. W. Ballantyne.

Col. C. J. Bond, A.M.S., C.M.G., F.R.G.S.
Monsignor Provost W. F. Brown, V.G.
Dr. A. K. Chalmers, D.P.H. (Medical Officer of Health, Glasgow).
Rev. R. J. Drummond, D.D., Rev. J. D. Robertson (representing the Morals' Committee of the United Free Church of Scotland).
A. G. Gardiner, Esq.
Rabbi Prof. Hermann Gollancz, M.A., D.Lit.
Rev. R. F. Horton, M.A., D.D.
J. A. Hobson, Esq., M.A.
Rev. F. B. Meyer, B.A., D.D. (Hon. Sec. National Free Church Council).
Dr. Charles Porter (Medical Officer of Health, Marylebone).
Dr. Eric Pritchard, M.A., M.D.
Dr. Amand Routh, M.D., B.S.
Dr. George Reid, D.P.H. (County Medical Officer of Health for Staffordshire).
Dr. A. T. Schofield, M.D.
Dr. W. C. Sullivan, M.D., M.B., B.Ch.
Councillor E. J. Smith (Chairman Health Committee, Bradford).
Rev. T. Sykes (Secretary National Brotherhood Council).
Lieut.-Col. F. E. Fremantle, M.D., M.P. (late County Medical Officer of Health for Hertfordshire).
Rev. James Marchant, C.B.E., F.L.S., F.R.S.Ed. (Secretary).

We deeply regret to record the death of Councillor E. J. Smith, for many years the Chairman of the Bradford Health Committee, who rendered conspicuous service to the Commission. His colleagues will ever hold him in high and grateful esteem.

Lady Selborne, Mrs. Bramwell Booth, Mrs. Walter Runciman, and J. A. Hobson, Esq., owing to the pressure of war work and the difficulties of travelling,

were unable to attend regularly, and therefore do not feel justified in signing the Report; Sybil, Lady Rhondda and the Duchess of Marlborough are abroad and their signatures cannot be obtained.

The Commission began its labours on May 13, 1918, and has held fortnightly sittings to hear witnesses, in addition to other meetings to consider the evidence taken. Eight sub-committees were appointed to draft various aspects of the Report, and many meetings have been held of the whole Commission to consider them. There has been a high average attendance of the Commissioners, some of whom, like Dr. Chalmers of Glasgow, Dr. Bond, Leicester, Miss Broome, Ipswich, Mrs. Clay, Cambridge, Dr. Reid, Stafford, Sir Rider Haggard, St. Leonards-on-Sea, Rev. J. D. Robertson, Edinburgh, have travelled long distances to the meetings, and all of whom have been unremitting in their labour, notwithstanding pressing claims upon their time and knowledge. The Bishop of Birmingham, President of the Commission and of the National Council, has, amidst the claims of his great diocese, rarely been absent from the chair, and has with remarkable urbanity governed its proceedings, so that, although there have been differences of opinions upon principles, the work of the Commission has been carried on in an atmosphere of perfect goodwill. It is by the unreserved desire of the whole Commission that specific mention is made of the names of the Conveners of these Committees, who have rendered most valuable service: Rev. Principal A. E. Garvie, D.D.; Dr. Amand Routh; Dr. Charles Porter; Dr. C. W. Saleeby; Col. C. J. Bond, C.M.G., F.R.C.S.; Dr. George Reid, O.B.E.; Miss Michelmore; Rt. Rev. Msgr. Provost Brown, V.G.; Sir E. Brabrook; Sir H. Rider Haggard. All have striven to understand the different aspects of the questions considered, and have shown a constant desire to discover the facts and to state the truth.

We have been fortunate in securing witnesses of competence and authority, most of whom voluntarily offered their services, and all of whom were eager to assist in the inquiry. Indeed, their numbers could have been multiplied many times. We have heard those whose names appear on pp. xiii–xv, and the substance of their evidence, together with the chief questions and answers thereon, appears in the second part of this volume. The evidence has been edited as in the previous volume, but nothing of importance has been omitted. "Indeed"—to quote from our previous Report—"the Commission feels that the Report is more valuable and readable by the necessary excision of many questions and answers which it was impossible to avoid, but which were not strictly germane to the inquiry."

The Commission desires to tender to these witnesses its warmest thanks for the invaluable expert help they afforded the inquiry.

Dr. T. H. C. Stevenson, C.B.E., Superintendent of National Statistics, who joined the Commission in 1913, has again rendered the Commission valuable service, under the conditions stated in the first Report. Dr. W. C. Sullivan also joined under the same conditions, and has freely placed his expert knowledge at the service of the Commission. The Commission desires to express its best thanks to them.

It especially wishes to place on record its indebtedness to Mrs. Mary H. Clay, representing the Mothers' Union, and also to the Mothers' Union, for undertaking an important inquiry among a large section of its members upon the causes and effects of the voluntary restriction of the birth-rate.

The Official Reporters' Association, who reported the first Commission, and also the Cinema Commission of Inquiry, have again done their intricate work promptly and well.

We cannot better express the limits of the responsibility of the Commission and of the National Council than in the words of the Preface to the first Report. It was there stated that "the Members of the Commission who have signed the Report are to be considered to have expressed their general agreement with its conclusions, without necessarily asserting their unanimity in every detail, especially of a technical character.

"The Council left the Commissioners free in every way to pursue their inquiries, and their Report is now presented to the public without alteration by the Council. The Commission is alone responsible for its Report."

The Commission has been reconstituted to pursue the further inquiries referred to in Section V of this Report. In this, as in other ways, the National Council of Public Morals will continue its efforts to serve the Nation, the Empire and the Race.

JAMES MARCHANT
(Secretary to the Commission and the National Council).

Rhondda House,
60, Gower Street, W.C.
1920.

The Members of the Commission have asked me, as one of the Vice-Presidents—to do what he himself could not do—to add a note to the Preface of the Secretary, expressing most sincerely their cordial appreciation of his constant, varied, capable and devoted services. He has not spared himself to advance the work of the Commission, which without his self-sacrificing labours could not have accomplished its task. The Office Staff also deserve warmest commendation for the way in which they have seconded him in all his endeavours.

ALFRED E. GARVIE
(Chairman of the National Council).

LIST OF WITNESSES

1. Professor A. KEITH, F.R.S., D.Sc., Professor of Anthropology.
2. Dr. AMAND ROUTH, M.D., B.S., F.R.C.P.
3. Dr. MARY GORDON, L.R.C.P., Inspector of Prisons in England and Wales.
4. Captain A. F. WRIGHT, R.A.M.C., Bacteriologist at Venereal Hospital, Rochester Row.
5. Miss MAUD ROYDEN.
6. The Right Rev. Monsignor Provost W. F. Brown, V.G.
7. Mr. N. K. HARRISON, Member of Amalgamated Society of Engineers.
8. Mr. SIDNEY WEBB, LL.B.
9. Judge HENRY NEIL, U.S.A.
10. Judge LINDSAY, U.S.A.
11. Mrs. H. A. L. FISHER, President of the Council for the Unmarried Mother and her Child.
12. Mrs. BRAMWELL BOOTH, Salvation Army.
13. Mrs. RANSOME WALLIS, Hon. Director of Mission of Hope.
14. Dr. GEORGE REID, D.P.H., County Medical Officer of Health for Staffordshire.
15. Mr. J. DUNCAN WATSON, M.Inst.C.E., General Manager of Birmingham Agricultural College.
16. Rt. Hon. J. M. ROBERTSON, M.P., P.C.
17. Principal P. HEDWORTH FOULKES, Harper-Adams Agricultural College.

18. Major LEONARD DARWIN, President of Eugenic Education Society.

19. Miss A. G. PHILIP, Director of Maternity Sub-section of Munitions.

20. Sir ARTHUR CONAN DOYLE, D.L., LL.D., President of the Divorce Law Union.

21. Sir HENRY REW, K.C.B., Director of the Ministry of Food.

22. Mr. NEWTON CRANE, Barrister-at-law, National Council for the Unmarried Mother and her Child.

23. Mr. CECIL CHAPMAN, J.P., Magistrate of Westminster Police Court.

24. Dr. T. H. C. STEVENSON, Superintendent of National Statistics.

25. Col. C. J. BOND, C.M.G., F.R.C.S., Medical Research Board.

26. Sir WILLIAM OSLER, M.D., F.R.S., F.R.C.P., Regius Professor of Medicine, Oxford.

27. Sir HORATIO BRYAN DONKIN, M.A., M.D., F.R.C.P., Member of Prisons Board and a Director of Convict Prisons.

28. Dr. C. W. SALEEBY, F.R.S.Ed.

29. Dr. E. B. TURNER, F.R.C.S., L.R.C.P., Chairman of Medical Research Committee of the National Council for Combating Venereal Diseases.

30. Dr. MARIE STOPES, D.Sc., Ph.D., F.L.S.

31. Sir RIDER HAGGARD, K.B.E.

32. Dr. C. KILLICK MILLARD, M.A., M.D., Medical Officer of Health for Leicester.

33. Mrs. STOCKS, Member of Family Endowment Committee.

34. Dr. W. C. SULLIVAN, M.B., B.CH., Medical Adviser to Liquor Control Board.

35. Mrs. PEMBER-REEVES.

36. Dr. EWART, Medical Officer of Health for Barking.

37. Mr. HAROLD COX, Editor of *Edinburgh Review*.

38. Professor LEONARD HILL, M.B., F.R.S., Director of the Department of Applied Physiology, Medical Research Committee

39. Miss NORAH MARCH, B.Sc.

40. Commissioner LAMB, Director of the Emigration Work of the Salvation Army

41. Mr. F. C. MACNAGHTEN, C.B.E., Vice-Chairman of Overseas Settlement Committee

42. Dr. ERIC PRITCHARD, M.A., F.R.C.P.

43. Dr. E. HALFORD ROSS, late Health Officer, Suez Canal Zone

44. ALDERMAN BROADBENT, C.B.E.

45. Mrs. CLAY, representing the Mothers' Union

46. Mr. W. L. GEORGE

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PROBLEMS OF POPULATION

PART I

THE REPORT OF THE COMMISSION

SECTION I

RECENT STATISTICS OF THE BIRTH-RATE

VERY little evidence of a statistical nature has been taken by the Commission since the appearance of its first Report, to which reference should be made for a general presentation of the statistical aspect of the matters under discussion. It is necessary here, therefore, only to bring the information in that Report up to date by recording the changes in the birth-rate and infant mortality which have since occurred.

The latest year for which the birth-rate was stated in our previous Report was 1912, when it stood at 23·8 children born per thousand population. Since then its course has been as follows—

BIRTH-RATE PER THOUSAND POPULATION

ENGLAND AND WALES

	Legitimate.	Illegitimate. Per 1000 pop.	Illegitimate. Per cent. of Births.	Total.
1913	23·1	1·0	4·3	24·1
1914	22·8	1·0	4·2	23·8
1915	20·9	1·0	4·5	21·9
1916	19·1	1·0	4·8	20·9
1917	16·8	1·0	5·6	17·8
1918	16·6	1·1	6·3	17·7

Legitimate.		Total.			Illegitimate.			
Scotland.	Ireland.	Scotland.	Ireland.		Scotland.		Ireland.	
					Per 1000 pop.	Per cent. of Births.	Per 1000 pop.	Per cent. of Births.
23·7	22·2	25·5	22·8	1913	1·8	7·1	0·6	2·8
24·2	21·9	26·1	22·6	1914	1·9	7·2	0·7	3·0
22·3	21·3	23·9	22·0	1915	1·6	6·9	0·7	3·1
21·2	20·3	22·8	20·9	1916	1·6	7·1	0·6	3·0
18·6	19·1	20·1	19·7	1917	1·5	7·5	0·6	3·1
18·6	19·3	20·2	19·9	1918	1·6	7·9	0·6	3·1

It will be seen that by 1918 the war had entailed a reduction of the birth-rate by some twenty-six per cent. in England and Wales, and that this reduction was confined to the legitimate element in the rate.

Both these features appear to us to be such as might have been expected under the conditions which have prevailed, and in themselves to give no special occasion for uneasiness. It is only natural that the absence on foreign service of so many young husbands should have led to a large reduction of legitimate fertility, and in fact this reduction has been much greater in the case of other belligerent countries. The testing time is now (end of 1919) and during the next few years, when we shall see to what extent fertility is restored with the restoration of family life. So far the indications point to a very considerable rebound, the births registered for the few weeks since demobilisation began to be effective in regard to this matter showing a return to, or even somewhat above, the rates prevalent before the war; but it is obviously impossible to assume that such rates will be maintained when the effect of the period of reunion has passed away, and all that can be done at present is to record the loss of births which the war has entailed.

The case of the illegitimate birth-rate is quite different. The circumstances of war do not entail the same reasons for its reduction—in fact, they might reasonably have been expected to increase it. Apart from any other influences of war in general tending in this direction

there was, in this war, an immense movement of the young womanhood of the country from the shelter of their homes—entailed by their necessary mobilisation for the production of munitions—to conditions of life more independent and more exposed to such risks as lead to illegitimacy.

The loss of population caused by the fall in the birth-rate as a consequence of the war may be estimated in various ways. The number of births in England and Wales in 1914, the last year unaffected by war conditions, was 841,767. If this number had been maintained in each of the next four years there would have been 588,487 more births than actually occurred. It is estimated that the population increased during these four years by about 550,000, so that if the birth-rate had been maintained the number of births would have slightly increased, but as against this it has to be remembered that the birth-rate had been steadily declining for many years before the war, and would presumably have continued to do so even if peace had been maintained. It is probable, therefore, that, even under conditions of peace, there would have been some decline in the number of births rather than an increase corresponding to the slight increase in total population which is estimated to have taken place during the war. During the last four years of peace the births registered had fallen, notwithstanding increase of population, from 860,327 in 1910 to 841,767 in 1914, and if the same yearly rate of fall had been maintained till 1918 the number registered in that year would have been 823,607, and in the four war years, 1915-18, 3,321,668, as against the 2,778,581 which actually were registered. The difference, 543,087, probably affords as good an estimate as we can get of the loss of births in England and Wales attributable to the war.

Fortunately the loss of population through diminished

births during the war has been accompanied by a decline in infant mortality. For each of the three years 1916–18 infant mortality has been less than 100 deaths per 1000 births, a level passed on only one previous occasion, in 1912. Even the influenza mortality in 1918, though it told with considerable severity on infancy, did not raise the rate higher than 97. For this several causes may be suggested. The child welfare work of the local health authorities, which has been so marked a feature of the last few years, may be bearing fruit. The scarcity and high price of fresh cows' milk may have contributed to the result by leading to substitution of less dangerous forms of infant food, particularly, of course, mothers' milk, but also possibly dried or condensed milk, which may be a much safer article of diet than stale and dirty 'fresh' milk. In view of the fact, referred to in our previous Report, that the results of the census of 1911 show that the mortality of children increases rapidly with the number born in the family, the great fall in the birth-rate has in itself presumably contributed to the fall in mortality. And, lastly, it has to be borne in mind that this fall in mortality merely represents the continuance during the war of a remarkable change in this direction which has characterised the statistics of most civilised countries for the past twenty years or so. In some other belligerent countries this movement has been interrupted or reversed by hardship arising from the war, but with us it has not. Obviously in view of the widespread character of the general movement it cannot be accounted for by merely local conditions.

The considerable mortality which occurs in early childhood, after the first year of life is past, was also showing a satisfactory decline until the influenza epidemic of 1918 raised it to a level reminiscent of the nineteenth century. Mortality at one to five reached its

lowest level in this country in 1916, when the rate was 12·8 per thousand living at these ages. It rose to 13·8 in 1917, also an extremely low rate, and to 21·2 in 1918, the average for 1911–14 having been 15·4. The increase was mainly, if not wholly, due to influenza. The significant fact is the lowness of the rates for 1916 and 1917.

In order to appreciate the significance of what has occurred in this country it is necessary to compare it with the course of events elsewhere. And first with other portions of the United Kingdom, since the above figures refer to England and Wales only. The changes in birth-rate and infant mortality during the war compare as follows—

	Births per 1000 living.		Deaths per 1000 Births.	
	1914.	1918.	1914.	1918.
England and Wales .	23·8	17·7	105	97
Scotland . . .	26·1	20·2	111	100
Ireland . . .	22·6	19·9	87	86

The decline in the Scottish birth-rate is about twenty-three per cent., as against twenty-six in the English, while infant mortality has declined in both countries by eight to ten per cent. In Ireland the movement recorded is naturally much less, and for several years now the corrected Irish birth-rate has been higher than the English. The birth-rate in the Isle of Man was as low as 12·4 in 1917, with an infant mortality rate of eighty-three.

Turning now to continental Europe, the comparison of chief interest is that with the other chief belligerent powers, but unfortunately most of the recent information available relates to neutrals, whose statistical services were not disorganised by the war. The birth-rate of France in 1918 (*i. e.* of the unoccupied departments) is returned as 10·4 per thousand living—a rate far too low, of course, to maintain the population even

in the absence of war and influenza. In 1913 it was 19·0, and in 1914 about 18·0 for seventy-seven unoccupied departments. So the decline from the very low starting-point in this case is nearly forty-five per cent.

We have not been able to obtain any corresponding summarised figure for Germany. The principal vital statistics of all towns of over 15,000 population have been published week by week throughout the war, but there is little information to be had regarding the rest of the population. A study of these returns, and of such other materials as he was able to obtain, recently published by C. Döring of Copenhagen (see Bevölkerungs Bewegung im Weltkriege, 1. Deutschland), arrives at the conclusion that the loss of population to the German Empire from decline in births during the war has been about 3½ millions, whereas we have seen that in this country it has been about 550,000, or, including Scotland and Ireland, say, 650,000 to 700,000 for the United Kingdom. He further estimates that the children born from May 1915 to July 1919 (*i. e.* procreated during the war) were one-third to one-half less than the normal, whereas, as already seen, the decline in our own case only reached twenty-six per cent. in its maximum year.

Some figures of the numbers of births in German towns of over 15,000 population in the month of August in successive years, quoted in the *Economic Review* of December 10, 1919, show that 51,428 births in these towns in August 1914 fell to 26,273 in 1917, and 29,108 in 1918, or by forty-nine to forty-three per cent.—much as in France. August 1919 shows great recovery, the decline from 1914 being only eighteen per cent. The decline is stated to have been greater for the remainder of the Empire than for the towns.

Official figures for Hungary, covering the period down to June 1, 1917, have been published by the *Pesti Naplo* and quoted from it by the *Morning Post* in October of

that year. These show a decline in births from 736,256 in 1913–14 and 710,795 in 1914–15, to 364,438 in 1915–16, and 330,862 in 1916–17.

Naturally, figures for neutral countries bear a very different aspect. The most recent which we have been able to obtain are as follows—

	1914.	1917.
Holland	28·2	26·0
Denmark	25·6	23·7
Sweden	22·9	20·8
Spain	29·8	29·0

The outlying portions of the Empire have been much less affected, on the whole, than the mother country. Some recent rates are as follows—

	Birth-rate.		Infant Mortality.	
	1914.	Latest.	1914.	Latest.
Australia	28·1	25·25 (1918)	71	59 (1918)
New Zealand	26·0	25·7 (1917)	51	48 (1917)
S. Africa (whites)		29·0 (1917)		80 (1917)
India		36·3 (1916)		202[1] (1916)
Ceylon		41·5 (1918)		168 (1918)

Canada has hitherto published birth-rates only for the separate provinces. In 1918 these varied in an extraordinary manner, from 38·6 in Quebec and 33·8 in Manitoba, to 17·0 in Prince Edward's Island, 13·1 in British Columbia, and 5·6 in Yukon.

The United States has also only just commenced to publish a national birth-rate figure, which so far only relates to a minority of the States. For this portion of the population the birth-rate in 1916 was 24·8 and the infant mortality 101.

Little further information than that contained in our previous Report is yet available as to the degree in which the decline of fertility has affected the various

[1] This rate is based on estimated population aged 0 to 1, not on births. The corresponding rate based on births would be somewhat lower.

classes of society. The records illustrating this matter on a national scale are collected only at the time of the census, and it is an unfortunate consequence of the war that the publication of those figures relating to 1911 has not yet been completed. We understand, however, that the results when published will be found in general accord with the inferences drawn for fertility in general from the figures quoted for a few specimen occupations in our earlier Report, and for the fertility manifested in 1911 from the tabulation of the births of that year in relation to occupations contained in the Annual Report of the Registrar-General. The fertility of the middle classes is much lower than that of manual workers, and amongst the latter the rates returned by the upper working-class are much below those of the lower. Appropriate allowance for difference in regard to duration of marriage and age of wife at marriage (since the longer a man has been married, and the younger his wife at marriage, the more children is he likely to have) modify the contrast to some extent, but only in a minor degree; and the effect of the higher death-rate amongst the children of the poor in reducing the effect of their greater fertility is also small as compared with the differences in their birth-rates.

We understand, also, that the differences in fertility of the social groups employed appear to have increased greatly during the lifetime of the older married couples enumerated in 1911. The story is carried back in this way to about the middle of the nineteenth century; and amongst the survivors in 1911 of the couples married in the fifties and sixties, the class differences in fertility are quite small as compared with those in respect of the more recent marriages. Possibly, if the record could be carried back a few more decades, such differences between the social groups would be found to disappear. This result seems to us to be of great

and ominous significance. For so long as we knew merely that the ranks were being replenished mainly from below it was possible to hold that this had probably always been the case, and to believe that, as the nation had prospered in the past, so it would presumably be fitted to prosper in the future under such conditions. This belief, however, appears to be no longer open to us. The differential fertility of the least prosperous and successful classes is seen to be a new feature, so far as we can judge, of the birth-rate situation, and we can, therefore, no longer argue that it has probably been proved by experience to be compatible with national advancement and prosperity. It may be, of course, that improved environment will be found to compensate for any ill effects of the new system of replenishment from below, where physique and the inherited capacity for success are at a minimum, but this must remain for the present a matter of doubt. All we can be certain of now is that the classes which have demonstrated superior capacity for the struggle of life in the past by rising in the social scale, have, during the recent past, ceased to contribute anything like their fair share to the nation's capital of men and women.

We have already passed unanimous resolutions in favour of a permanent Anthropometric Department under the Ministry of Health and of the establishment of a General Register.

Awaiting the full consideration of these proposals by His Majesty's Government, which we hope will result in their adoption, we observe that preparations are already being made for the usual decennial census in 1921. We have the honour to suggest that the Dominions should be approached by His Majesty's Government to ascertain whether the census of these islands and of the other parts of the Empire should be simultaneous, so as to constitute a true Imperial

Census, and that the data to be collected should be as far as possible identical everywhere. We further suggest that statistical authorities dealing with the census of population in each part of the Empire should, at the same time, as far as practicable, obtain the necessary information as to the production and supply of food in each area.

It is also very desirable that an inquiry on broad lines should be initiated into the relation of religion to the birth-rate. It is not intended by this to inquire into the *minutiæ* of denominational variations, but to ascertain the significance of the three types: Anglican or Protestant; Roman Catholic; Jewish.

It is felt to be extremely desirable that the results should be presented to the public at the earliest possible moment; and that they should be accompanied by such an official commentary and elucidation as would be a real assistance to the public in mastering the significance of the facts they disclose. This, it is suggested, need not interfere with the usual issue by the Registrar-General of his preliminary statement of figures.

We suggest that it would be advantageous to the inquiry if certain members of this Commission, who have given special attention to the subject, were invited to consult with the authorities as to such possible modifications of the form of questions in respect of parenthood as would facilitate the work of future students of the subject.

We now pass to consider one of the most important causes of the decline in the birth-rate, the voluntary restriction of the birth-rate.

Section II

THE VOLUNTARY RESTRICTION OF THE BIRTH-RATE

Voluntary restriction is taking place on a considerable scale in the Western civilised world. That it is taking place, not eugenically, but dysgenically, is generally maintained.

The largest of the roots—the tap-root—of the new attitude of married folk towards parenthood is what is erroneously called High Civilisation. Western civilisation practices monogamy; but on the one hand there is a large army of women who can never marry because husbands are lacking, and on the other there is a host of loose women who, for the most part, do not reproduce their kind. When large families were the rule, and women bore children whether they willed it or not, the population increased in spite of its being reduced by epidemics and infantile mortality. Since the growth of medical science has enabled mankind partially to combat these evils, the gradual decline in the birth-rate, due to the knowledge of artificial means of preventing conception, has not at once been shown in a reduction of the population. If, with the wider spread of this knowledge, however, the decline in the birth-rate continues, the necessary increase will be changed into an inevitable decrease. Thus what is called " race-suicide " has begun.

While the practice of restricting the family began with the educated and professional classes, it is gradually

spreading through the whole community for reasons which are not far to seek. Child-bearing, nursing and rearing of children are tedious and full of anxieties, especially if sufficient domestic assistance is not forthcoming. For the middle and the upper class the costs of education are very large, and threaten to increase in the near future. If the education of girls is not as expensive as that of boys, many parents feel under obligation to make more adequate provision for their future. These causes combine to prevent the increase of families, as is evident from the great number of "only sons" killed in the late war.

This subject requires further consideration in its ethical, economic and social, national and international aspects.

I

THE ETHICAL ASPECTS

Common Agreements

Regarding the ethics of the problem, there are certain principles as to the control of conception which probably will be agreed upon by all. They are as follows—

1. Except under medical advice and action with a view to removing serious maternal risks, no means should be used to terminate the pregnancy when there is a possibility that conception may have taken place.

2. No persons who are likely to transmit any serious physical or mental taint should have children.

3. No preventive means which could injure the health of potential parents or children should be used.

4. No husband or wife should refuse the duties of parenthood for solely selfish reasons.

5. While it cannot be impressed too strongly that parents should not be relieved of their responsibility without discrimination, yet it is the duty of society to

remove the disabilities which, without any fault of theirs, may be imposed on worthy parenthood.

6. In view of the spread of information (much of it highly injurious) concerning contraceptives, the Commission regards it essential that sound instruction should be given, especially to young persons, in the laws of sex hygiene, in the wrongfulness of sex immorality, and the prevalence and dangers of venereal disease, in the right and healthy use of the state of marriage and in the immorality of the destruction of the products of conception with criminal intent at any period of pregnancy, and in the duties, responsibilities and privileges of parenthood, the importance of healthy offspring, and the value of family life to the nation and the human race.

I. The Ethics of the Means of Restriction

There is no moral issue raised in respect of the limitation of the family when good reasons for such a course can be shown. The moral difficulty arises as to the means which may be used for the purpose. At the present time all attempts to control the size of the family by voluntary means, apart from abstinence from the marital association or its restriction to periods of supposed immunity from conception, is regarded by a large number of persons as wrong, and has been condemned by the Christian Churches and the Jewish religion.[1] Since this decision is being widely challenged

[1] The Roman Catholic Church makes this concession regarding intermenstrual periods with a strict qualification, " when all deterrents fail, married couples may be allowed to limit intercourse to the mid-intermenstrual period, sometimes called *tempus ageneseos* (Mgr. Brown, *The Declining Birth-Rate*, p. 393).

The Committee of Anglican Bishops " condemns entirely the use of mechanical and chemical means to prevent conception, but admits that there may be cases in which a married pair may legitimately desire to limit their family. In these cases the Committee does not

as obsolete and as requiring re-consideration in the light of recent conclusions and present knowledge, it seems desirable to state the moral issue clearly and fully, and to present the arguments for and against the use of contraceptives as impartially as possible.

A. Arguments for the Use of Contraceptives

What is being urged in favour of such use may first of all be stated :

1. The voluntary control of conception by civilised mankind is the outcome of comparatively recently acquired knowledge of a physiological kind, and of the application of this knowledge in a field of human life and conduct which, up to the last forty or fifty years, has been partially under the control of religious and moral teaching, and partially of the instincts and the emotions. It is one instance of the acquisition by civilised man of an increased power to control his environment. The urgent necessity is, therefore, not to condemn, without discrimination, the exercises of this newly acquired power of control, but to guide it into channels which shall lead to race regeneration instead of race decay. Further, it seems clear that the conduct of married persons in this matter of the voluntary control of the birth-rate cannot be separated from human conduct in general, and that it must be judged by the

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condemn those who restrict their marital relations to those periods of the month in which conception is less likely to take place" (pp. 63–64).

According to the Chief Rabbi, "Mechanical methods are 'an abomination'; there are, however, washings and other morally more or less innocuous methods." On the advice of a physician, "some, not all, methods by the woman to prevent conception" would be, in exceptional circumstances, sanctioned (p. 435).

In the statement issued by the Free Churches it is said, "the use of any artificial means of preventing conception (whether mechanical or otherwise) is to be very gravely condemned, as Christian morality requires that all natural functions shall be kept under moral self-control."

same religious standards, where such are admitted as authoritative, and the same canons of individual and social morality as are applicable to human conduct as a whole. The rightfulness or wrongfulness, in other words, the morality or immorality, of any action must be judged by the motive which prompts it, and to a certain extent the effect such conduct exerts, or may exert, on the welfare of the present and future generations. If the motive be a selfish one, if in any given case reasonable economic and other facilities exist for the begetting and rearing of children in health and decency, if the object be to escape the rightful responsibilities and the burdens which normal married citizens of both sexes ought to bear, if the aim be the gratification of individual desire at the expense of the best interests of the next generation and the community, then the practice of voluntary restriction must be undoubtedly condemned as immoral. If, on the other hand, the motive be a worthy one, if conception be prevented with the genuine desire to avoid ill health and suffering by the mother, or the children, for whose support and decent upbringing no adequate means exist, in short, with a desire on the part of both parents to avoid responsibilities which in the circumstances are impossible of fulfilment, then such conduct cannot be regarded as immoral. In cases in which the desire to limit the number of offspring is not selfish and therefore not immoral, the question then is as to the methods by which it is sought to bring about this result.

2. The procreation of children is not the only object of matrimony, and there is surely a dishonouring of this very object in having children born when both parents do not wish for them. It cannot be desirable that, as is often the case, a married woman should speak of expectant motherhood as of "being in trouble," and yet we cannot blame her when she knows that her

child will not only have no proper environment and bringing up itself, but will by its arrival lessen the possibility of doing for the other children all that is necessary. If it is immoral to avoid having children from unworthy motives, it is surely also immoral to have child after child under circumstances which, humanly speaking, are such as to render the proper upbringing of the children impossible.

3. The marital association has a meaning and value of its own for husband and wife, for it is the ultimate expression of the love of the two who have become one flesh. Although it is usually followed by the birth of a child in which the two natures blend, it need not be an imperfect union if on occasion, for worthy and pure motives, this particular result of married love be prevented.

4. Though it be true in many cases that if all the duties of motherhood, especially lactation, were carried out, the family would be moderate in number and properly spaced, yet there are numerous exceptions, and further, there are some women who are incapable of efficient lactation.

5. It may be questioned whether the demand for total abstinence from marital association on the part of husband and wife in such circumstances is a morally defensible one, especially in working-class families, for whom housing and other economic and social conditions render such a practice so extremely difficult as to impose a greater moral strain than should be placed upon them. Moreover, there are many married people, especially the young, to whom long-continued abstinence is not only difficult, but physiologically and pyschologically deleterious.

6. To the concession which is, under such conditions, offered by some of the Churches, that marital association should be confined to the mid-inter-menstrual periods when conception is least likely, two objections may be

offered: (1) The supposed immunity is unreliable and (2) as the intention is to avoid conception, there is no more moral virtue in this mode of prevention than in others that are condemned.

B. Arguments against the use of Contraceptives

1. It is maintained that this matter is not an open question, in regard to which the motive of the restriction, or the way in which it may take place, only needs to be taken into account. The moral principle which must be applied to the question is based not only on ecclesiastical authority, but also on religious conviction. It is perilous to disregard deeply-seated and widely-spread intuitions in which morality and religion blend together.

2. Marriage and parenthood are so related together in God's ordinance for the continuance of the race, both in nature and in His law, that the marital association should not take place unless its possible consequence in parenthood is obediently accepted.

3. While no harsh judgment should be pronounced on those, if such there be, who cannot, exercise the necessary self-control, the standard thus set for the conscience of man by the will of God must not be lowered, but held high. That a moral duty is difficult is not an adequate reason for setting it aside. If the demand for chastity is to be made on the unmarried, it is imperative to maintain the idea of sexual self-control in marriage as well as before it. The lowering of the standard for the married must have, as its inevitable result, the lowering of the standard for the unmarried. Unmarried women are gaining information in these matters from their married friends and from published works written for the married; and are making use of it increasingly, with disastrous moral results.

4. The concession, as regards the time of the marital

association made by some of the Churches, demands a very considerable measure of self-control, and no artificial interference with the natural process is involved. It is therefore not open to the same objections as the other means of prevention suggested.

5. The love of husband and wife has normally its completion not in their delight in one another, but in their willingness to assume the common responsibilities of parenthood. The refusal to accept these responsibilities depreciates the moral value of their mutual affection, which may easily degenerate apart from such discipline.

6. In controversy it is necessary to remember that by abstinence the regulation of the family can be secured without the use of any artificial means of prevention.

II. The Ethics of the Limitation of the Family

Apart from the moral issue involved in the means used for preventing conception, the limitation of the family itself raises a farther moral question. The life of the nation and the race is maintained and renewed, and the continuity necessary for progress is secured, by parenthood. The natural capacity for parenthood thus imposes a moral task, as it involves a social trust, and therefore cannot be regarded as a merely individual interest to be determined solely by personal inclination. Within the limits which wisdom, justice and affection prescribe, healthy parenthood as the normal outcome of marriage should be insisted on as an obligation.

1. There may be conditions in which an increase of the population is not desirable; but in the United Kingdom, and still more in the Empire, these conditions do not now exist. Even before the war there was a dangerous decline in the number of children born in this land, and the prospect was not remote that a

time might come when the population would so decrease as seriously to affect the defensive and industrial powers of the Empire, to lessen its influence among, and its service of the other nations, and to give a smaller field of selection for all activities of civilisation. The loss of nearly a million of the fittest of our men in the recent great conflict has impoverished our male stock, and has greatly increased the disproportion between the numbers of the sexes. In such circumstances, worthy parenthood is a service to the nation, the Empire and the race. For as in war, so in peace, the question of man power is of pre-eminent importance.[1]

2. At present, the decline of the birth-rate is greater where the quality of the children might be expected to be better. The child-bearing is at present relatively the greatest among families and in homes in which the economic and social conditions do not allow of the healthy and proper upbringing of so many children. The reduction is taking place in the average size of the families, in always greater degree, in those classes where the condition for the welfare and education of the children are the best.[2] This disproportion in relative birth-rates is an ominous sign for the future of the nation and the Empire. The duty of parenthood needs to be urged upon the well-to-do, who can provide the more favourable conditions for the bringing up of a family. It is surely unnecessary to say that we seek entirely to discourage parenthood among the unworthy of any class. Under that term we include not only those individually diseased in body or mind, but also those who are liable to transmit such defects, though not themselves suffering therefrom.

3. While there is wisdom to be commended in the

[1] This topic is discussed in the section "National and International Aspects."

[2] The average number of children in the professional classes is now 2·13, while among the miners it rises to 3·58.

purpose not to incur responsibilities which cannot be met, it may easily pass into a timidity which shrinks from what might prove a sacrifice good for the character and bringing joy of heart. Comfort and ease, not to mention luxury, are not necessarily the best conditions for the personal development of either parents or children. The healthiest, happiest and best family life is often to be found where all the members are accustomed to minister to one another's joys and to bear one another's burdens in love. The call of the nation to its manhood and womanhood to endure hardships, run risks, meet dangers and make sacrifices was fully and finely responded to during the war. There should be a similar response to a call for the continuance and increase of life. The refusal to accept the burden of parenthood on unworthy grounds is not only often an evidence of selfishness, but, if it becomes general, will have as its consequence a slackening of the moral fibre of the nation. While there may be reasonable prudence, what is also still more necessary is a reasonable courage. Conscience, and no lower consideration, should decide on the acceptance or the refusal of parental responsibility.

4. Family life, especially where there are children, is the finest and best school of virtue. In such a home the children, by the demands for consideration towards, and even sacrifices for each other which love lightens, are prepared for the duties of citizenship. An only child with no such interests is likely to grow up selfish and spoiled. Parents also are morally disciplined and developed by the care of their children. It would be a serious moral loss to the nation if the number of such homes should be decreased.

5. The duty of individual men and women to the nation and the Empire, and even to the race, has been emphasised. But the responsibility of the country to parents in the discharge of their obligations must equally

be asserted. If the community desires an adequate number of children of good quality, it must be prepared to see that the burdens which weigh too heavily upon many parents are relieved. Among the reforms which have been proposed are: proper housing, a living wage, training for and care of motherhood and infancy, facilities for education, and relief from taxation proportionate to the responsibilities involved.[1]

6. The need for a properly regulated redistribution of the population with special regard to the due proportion of the sexes in the Empire is elsewhere discussed fully, but may here be mentioned as one of the most important methods of relieving the burden of parenthood in large families.[2]

7. It is a wiser and better policy to suit the conditions and environment to the needs of a family rather than to reduce the number of children in order to fit a defective and injurious state of society. More important still is the formation of a public opinion and popular sentiment which will encourage parents to regard the bearing of their burdens as a contribution, valued and approved, to the common good of the nation, the Empire and the race.[3]

II

ECONOMIC AND SOCIAL ASPECTS

In Section II of the previous Report of the Commission, presented in 1916, the economic and social aspects of the declining birth-rate were discussed upon the evidence then taken, which was considered to be rather scanty, except on the housing question, which was more fully discussed. It was held that there was no reason to think

[1] See the section "Economic and Social Aspects."
[2] See the section "National and International Aspects."
[3] For the reservations under which this section has been signed by members, see the end of the Report.

that a further reduction in the English birth-rate would, at the present time, give a larger yield of wealth per head; that wherever political or social conditions bring a man or a class of men into a position of hoping to rise or fearing to fall, the family will be restricted; that from the world standpoint there is no evidence of general over-population; and that the effect of the war has been dysgenic. It was stated that such statistical evidence as was available indicated that the better-to-do classes restrict more closely the size of their families, and that even among certain of the wage-earning classes the birth-rate varies inversely with the income. The eugenic question was not considered in detail. The Addition to the Report contained a number of suggestions for the relief of the burden of parenthood. It would seem, therefore, that all that is necessary in the present section of this Report is to set forth the additional evidence on the matters in question that has been furnished since the publication of the previous Report, and to indicate briefly the economic considerations that witnesses have laid before us—

1. Recent legislation has effectually destroyed the child of the poor as an economic asset. While the restrictions upon child labour are most desirable, and will tend to industrial efficiency, yet, by the working of an inexorable economic law, restrictions upon the earning capacity of children must lead to increased parental burdens. If juvenile labour is made scarcer, wages must necessarily be raised. But since it may be long before this economic law brings any relief, the burden may become almost insupportable in the case of large families. Nothing has yet been effectively done by legislation; but here is a good ground for some measure of relief.

2. The effect of a regulation of the Ministry of Munitions discharging women upon the discovery of pregnancy

was to induce them to conceal their condition, and in some cases to get rid of it. This was met by a system of graduation of work from medium to light during the continuance of the condition, and by financial assistance, with good results.

3. In respect to the population-sustaining capacity of the United Kingdom, valuable information was supplied by Sir Henry Rew.[1] The pre-war figure was that approximately one-half of the food supply was produced at home; Ireland may be regarded as practically a self-supporting country. Of the 56 million acres which form the total area of Great Britain, 31,748,000 are comprised in the farms of the country, and are termed the cultivated area. A further area of 13⅛ millions of rough grazing in Scotland maintains a certain number of sheep. Woodlands also are not included in the farm areas, and cover 2,700,000 acres. The remaining 8 million acres, fourteen per cent. of the whole, are not utilised for production (except as allotments and gardens), but include towns, roads, railways, mines and other purposes to which land can be put. The farm area is almost exactly half arable, half pasture. In 1871 it represented 1·1 acres per head of the population; in 1911, ·79 per head. There seems to be a reasonable possibility of increasing land production by adding to the amount of land under cultivation. If State aid were applied to the reclamation of land much might be done, but there is not much hope if it depends upon private enterprise.

The Commission does not offer any conclusions or recommendations on this, as it recognises inadequate evidence, but submits, as relevant to this section, a fuller statement on the two subjects of—

1. The endowment of motherhood, and, as in some respects related to it,

2. The care of the unmarried mother.

[1] See pp. 147–161.

I. The Endowment of Motherhood

We have considered, in relation to the causes of the decline in the birth-rate, various schemes having in view the economic elevation of parenthood.

We have obtained evidence on this subject from several well-known people, most of whom are members of the Family Endowment Committee.

(*a*) *Proposals and Arguments for Endowment*

1. It will be convenient to state the proposals made by that Committee in the pamphlet under the title of "Equal Pay and the Family."

It suggests the payment to women of all classes of the community at a flat rate of an allowance of 12*s.* 6*d.* a week to the mother for eight weeks before confinement; and as long as she has one or more children under five years old—

Five shillings a week for the first child until the age of five years, and 3*s.* 6*d.* a week for each subsequent child under that age.

That is to say, every mother with one child under five years would draw 17*s.* 6*d.* a week, every mother with two such children 21*s.*, with three 24*s.* 6*d.*, and so on. Other proposals carry the allowance for children on to the age of fifteen years.

Upon some portions of this scheme there are differences of opinion in that Committee, and there are similar differences among our witnesses.

The arguments in favour of this scheme, or some modification of it, may be stated briefly in the terms used by witnesses, but are more fully set forth in the Notes of Evidence.

"Strong, vigorous children are the State's greatest asset, at the same time sickly and ailing children are its greatest danger, and the old custom of allowing

the health and well-being of children to be left entirely at the mercy of the financial circumstances, good or ill health, good fortune or misfortune of their parents is a wasteful and dangerous policy " (Mrs. Pember-Reeves).

2. Mr. Sidney Webb advocated the proposals as mitigations of the economic penalisation of parenthood.

" The first, and most obvious penalisation, as it is the most nearly universal, is the fact that nearly all the incomes of families fail to vary according to the number of children. Every additional child means, accordingly, more straitened means for the family. This is intensified where the means are narrow. More than two-thirds of all the families fall below the income tax minimum of £130 a year—a sum manifestly insufficient, at the present and probable future level of prices, to enable even a small family to *obtain the bare necessities of healthy and civilised life.*

" The economic penalisation is no less severely felt among another couple of million families, who have to live on between £131 and £200 a year, and who have higher standards of health, education and other conditions of civilisation than are yet common among the manual-working wage-earners."

The birth of a healthy child, Mr. Webb argues, is a social service, and there should be public recognition of the service, and public provision for its cost. From the standpoint of the economist we can hardly spend too much of the income of the nation in getting its citizens well born. It is already law, and needs only honest enforcement, that every child must be fed, clothed, housed, educated and generally nurtured at least up to the commonly accepted standard, or, in the alternative, fed, clothed, housed, educated and generally nurtured at the public expense. To put pressure on negligent parents by letting the children suffer is a heartless and wicked device. We ought to insist that every suffering

child should be promptly given what it needs, and prosecute the negligent parent afterwards. The same argument requires that we should make education, everywhere and at every grade, effectively free. Mr. Webb also recommends a revolution in the income tax, and, as a condition of national or municipal housing, that no more rent should be charged to a family of five or six than for the smaller accommodation to a family of two or three; and he generally calls for a system of universal endowment of children.

3. Judge Lindsay of the United States quoted from a judgment of Lord Thurlow in the English Court of Chancery that—

"The State, in its capacity as the over-parent, was not only burdened with the responsibility of looking after the child when the child needed help and assistance, but there was no child in the realm which its long and strong arm could not reach to succour and protect."

To reduce the national inequalities, Judge Lindsay contends, by greater equality of conditions, we must begin with the mother, for the life of the child commences before it comes into the world. The balance of mind and emotion, as well as its physical form, depend largely on the condition of the mother during the prenatal period. The nation is responsible for its mothers, because the children of the nation are the State's asset for the future. Motherhood is a function of the nation—the worst-paid function there is. Men and women are paid for other services, but not for this.

(*b*) *Arguments against the Endowment of Motherhood*

The arguments against these proposals which have been advanced are the following—

1. An annual cost of £250,000,000 is suggested in the pamphlet quoted, and by some of our witnesses, but this appears to be based upon the lower birth-rate now

recorded, and not to take into account the encouragement which the proposed allowances will give to an increase in the birth-rate. Moreover, the legislature cannot grant annuities upon such a scale without taking effective measures to ensure that the money is actually applied for the benefit of the children and the relief of the mother. This could only be done by the establishment of a system of inspection, the cost of which must be added to that of the pensions.

2. No practical suggestion has been made as to how this fund is to be raised. To provide the cost of the endowment of motherhood alone, on the scale suggested, the present yield of income tax would have to be doubled.

3. It would discourage that thrift and foresight which are the best warrant for accepting the parental responsibility.

4. It would encourage illegitimacy if provision were made for the mothers and children on the same footing as for children born in wedlock.

5. Whether or not a limit of income be fixed, as suggested by some, the effect in the encouragement of improvidence and recklessness would necessarily be greater in those who have already a tendency to these vices, and the result would be to increase the relative fertility of those who are least qualified to be good parents, and to accentuate the evil which is already observed to exist by depreciating the average quality of the population.

6. Additional weight is given to all these considerations by the movement now going on for the better remuneration of labour and the improvement of its standard of living, tending to the greater independence, and at the same time the greater responsibility of the working-man. The present is not the best occasion for the introduction of a system prejudicial to that independence and responsibility. The moment when the

working-man has more means given him to maintain the one and discharge the other is not the moment for relaxing both.

7. Mr. Harold Cox observed further that the proposal to give a State subsidy to every woman who produces a child would only increase the evil : " A child born and reared in a crowded urban area has only a poor chance of becoming a fine specimen of humanity, even if the State pays for its maintenance " (p. 317).

(*c*) *Schemes in Operation*

A valuable Report on Maternity Benefit Systems in certain foreign countries by Dr. Henry J. Harris has been recently presented to the Department of Labour in the United States. It shows that many countries have adopted systems more or less resembling that of our own National Health Insurance Act, but falling short of the comprehensive schemes of Endowment of Motherhood that have been advocated in this country. In New South Wales, however, a Bill has passed the Legislative Assembly providing for the creation, at the cost of the employers of labour, of a Children's Maintenance Fund, to continue until fourteen years of age, and to extend to illegitimate children. As the money is to be payable to the mother, and not to the father of the child, this is virtually a scheme for the Endowment of Motherhood.

Having regard to the economic and other difficulties of this question, we do not recommend for adoption any of the schemes that have been submitted for our consideration. But this is a question which we think should be left open, as it demands and deserves further inquiry than it has yet received—an inquiry which we hope to be able to give to it. If, however, a plan

could be devised by which a reasonable provision, similar to that made for the widows of sailors and soldiers, would be made for the widows of men in civil employment who are left with young children, and even for the wives in like circumstances whose husbands are incapacitated, we should regard it with sympathy.

II. The Care of the Unmarried Mother

It is quite clear that there is a marked difference of opinion as to the attitude which the State should adopt towards illegitimacy.

Formerly the whole trend of legislation, supported by the mass of public opinion, was in the direction of severity towards the woman who gave birth to a child out of wedlock; and everything was done to let the penalty for unmarried intercourse fall as heavily as possible upon the mother and child. This is specially true of the law of England, which, unlike the laws of all Western nations, does not allow a child born out of wedlock to become legitimate by the subsequent marriage of its parents. The fact that severe treatment of the mother must penalise the child as well has not prevented the legislature from enacting bastardy laws which lessen the chances of the child's survival, except where the mother has private means or can obtain help from relatives or friends.

If she is able to prove the paternity in Court—a very difficult proceeding in many cases—a mere pittance towards the child's support is all that the law still allows a woman to recover from the father, even though he may have ample means.

It is apparent that in such legislation there is a very strong determination to discourage illegitimate births as much as possible, and an unwillingness to make things easy for the mother, lest encouragement should be given

to unmarried intercourse. It is true that institutions such as the London Foundling Hospital, established by benefactors out of compassion for the unhappy lot of the child born out of wedlock, and for its mother, are doing something to mitigate the effects of the severe bastardy laws, but it is also true that when that particular hospital accepted every child that was offered, whether brought by the mother, or simply left in the basket placed at its gates, public opinion was aroused, and the practice had to be given up. Put quite frankly, even brutally, the community did not want the illegitimate child, and was very jealous of any benevolent action tending to make illegitimate births free from disgrace and hardship to both mother and child.

Of late years, however, a good deal has been done to improve the lot of the illegitimate child and its mother, and the whole question has come to the front very much since the early years of the war. Attention has been drawn to the very high mortality of illegitimates, especially in the early months of life, and attempts are being made by the State, with considerable success, to reduce preventible mortality by providing properly for both mother and child in public and private institutions.

The great decline in legitimate births in Great Britain since 1914, due to causes arising out of the war, as well as to the increased practice of voluntary restrictions by married couples, has alarmed the country, and the illegitimate child has come to be regarded as helping to make up for the deficiency of births in wedlock. But it is by no means clear that public opinion has, as a whole, undergone any fundamental change of attitude towards the unmarried mother, nor are there any signs of such a change coming about in the near future.

Those who have shown themselves interested in the whole question are mainly either religious people who wish to help the unmarried mother to reform, or philan-

thropic persons anxious to improve the position of the mother and the child, or those who are keenly interested in maintaining the present rate of population of the country. The evidence given before the Commission has been entirely on these lines, and has not dealt with the attitude of the general public towards illegitimacy.

ENGLAND AND WALES. ILLEGITIMATE BIRTHS, 1876–1918

Period.	In proportion to total Births.		In proportion to total population.		In proportion to the Unmarried and Widowed Female Population aged 15–45 years.	
	Rate per 1000.	Compared with rate in 1876–80 taken as 100.	Rate per 1000.	Compared with rate in 1876–80 taken as 100.	Rate per 1000	Compared with rate in 1876–80 taken as 100.
1876–1880	47·5	100·0	1·7	100·0	14·4	100·0
1881–1885	48·0	101·1	1·6	94·1	13·5	93·8
1886–1890	46·3	97·5	1·5	88·2	11·8	81·9
1891–1895	42·4	89·3	1·3	76·5	10·1	70·1
1896–1900	41·0	86·3	1·2	70·6	9·2	63·9
1901–1905	39·5	83·2	1·1	64·7	8·4	58·3
1906–1910	40·2	84·6	1·1	64·7	8·1	56·3
1911–1915	43·1	90·7	1·0	58·8	7·8	54·2
1915 .	44·5	93·7	1·0	58·8	7·4	51·4
1916 .	48·0	101·1	1·0	58·8	7·6	52·8
1917 .	55·6	117·1	1·0	58·8	7·4	51·4
1918 .	62·6	131·8	1·1	64·7	8·2	56·9

A. STATISTICS OF ILLEGITIMATE BIRTHS

The births registered during 1918 include 41,469 of illegitimate children, an increase of 4,312 upon the number in 1917, coincident with the decrease of 5,685 in total births. Illegitimate births have thus increased by 11·6 per cent., while legitimate births have decreased by 1·6 per cent. As a result of these changes the proportion of illegitimate to total births, which fell to a minimum of 3·95 per cent. in 1901–05, has now risen to

6·26 per cent., the highest ratio reached during the last fifty years, and not much below those prevalent between 1846, when the record commences, and 1865. Of course, in 1846–50 the legitimate birth-rate was almost double that of 1918, so that a very much higher degree of illegitimate fertility was implied then than now by the fact that the proportion of illegitimate births was 6·7 per cent. The table on p. lxi shows, indeed, that, judged by the proportion of births to possible mothers, illegitimacy was more prevalent in 1901–05, when the proportion of illegitimate births was at its lowest, than in 1918. It was higher in 1918, however, than in any year since 1908, the steady fall of the preceding half-century having continued up to 1917. The rise now recorded is, therefore, quite a new feature.

B. Causes of Illegitimacy

Illegitimacy is one of the most persistent problems with which any organised community has to cope; and here we must draw a distinct line of demarcation between illegitimacy and prostitution, which requires a totally different solution. It should be realised that sex passion is not alone at the root of this problem. We are faced here rather with the impulse of a moment, to which natures untrained to see life as a whole are apt to give way, and it is only beginning to be realised that parents are greatly to blame for their almost complete lack of supervision of their children during adolescence, the dangers of which writers on sex hygiene and psychology have long pointed out. Ignorance of the most elementary laws of biology is a factor not appreciated at its true value by a great many people.

It has been alleged that illegitimacy is due to a low standard of male morality sheltered by the law. There are other factors, however, which should be recognised in this connection.

Economic Factor.—At present early marriages are difficult, if not impossible; that is, marriage at a time when physically the need for it is most urgent.

Environment.—It has been stated that the majority of mothers of illegitimate infants are between the ages of sixteen and twenty years, and it has been asserted by some that one of the chief causes is bad environment. (*See* P. G. Kammerer, *The Unmarried Mother*, p. 305.)

Domestic servants as a class are a particularly easy prey to the persuasions of men, ignorance in their case being supplemented by the comparative monotony of their lives, and the restricted opportunities for recreation. Mrs. General Booth, of the Salvation Army, said in her evidence, speaking of servant girls: "The most respectable and best of them have been brought up in such absolute ignorance that they are definitely preyed upon by men;" and again, speaking of the women who have passed through the Salvation Army Homes: "Sixty or seventy per cent. are domestic servants. The servant is homeless, and directly her condition is discovered, she is turned out, whereas the factory girl and barmaid generally live at home, and they are not turned out."

Maternal Instinct.—The maternal, as apart from the purely sexual instinct, cannot be overlooked as a factor, though possibly a minor one, when dealing with this problem.

The War.—The war has to some extent contributed to the present rate of illegitimacy. The uprooting of normal family life, the concentration of large bodies of men, and in a minor degree of women, under abnormal conditions has tended, the world over, to bring about a relative increase in illegitimacy.

Marriage Law.—The present Marriage Law,[1] in the opinion of a large number of social reformers, has also helped to swell the illegitimate birth-rate, by leading to

[1] See pp. cxxvi, cxlvi–cxlviii.

co-habitation amongst separated persons who would be willing to marry, but are not free to do so.[1]

C. Classification

It is probable that the largest proportion of illegitimate children are the result of temporary unions. Mrs. H. A. L. Fisher (Chairman of the National Council for the Unmarried Mother and her Child) in her evidence made an attempt at classifying these unions—

1. "Children of people who are living together as man and wife, but who have not been legally married either—

(*a*) from sheer casualness, or
(*b*) from principle, or
(*c*) from the existence of a living, but absent other husband or wife (either legally separated or merely vanished).

"The workers of the S. & S. F. A. at the beginning of the war, in some districts discovered a surprising number of these families. In some cases, the parents could not legally marry, because one or the other of them was married already, and in many others they simply had never taken the trouble or thought it worth while. In a few cases one or the other definitely did not wish to, and I personally have come across cases, both in the North and South, where parents who could have married did not do so, in order to avoid making distinctions between those of their children who were born before, and those who were born after marriage.

2. "A further large class consists of the children who were born out of wedlock, but whose parents have subsequently married.

"It is clear that children of these two classes present a problem entirely different from that of the ordinary

[1] See Section IV C. Laws of Marriage and Divorce.

illegitimate child, whose father takes no responsibility for its maintenance, and who is, therefore, practically entirely dependent on its mother. This is the type of mother and child, of course, with whom the National Council is primarily concerned. The conditions affecting the two first classes would not materially differ from those of the legitimate children of similar social standing. Within the official statistics all are put together. This suggests that the facts as to the death-rate of the last class are in reality even worse than they seem, high though that death-rate already appears to be " (p. 47).

Classification might also be attempted on the lines of the results of bigamous marriages, married and unmarried mothers of illegitimate infants; or, again, of mothers of one or more of these children.

Mrs. Ransome Wallis, Hon. Director of " Homes of Hope," spoke in her evidence of the danger of neglecting to care for the mother of the second child. " The result of the Societies not feeling able to attempt second cases is that the mothers are in the workhouse sometimes for years with the two children, merely deteriorating, and altogether hopeless of ever getting out again."

Finally, there are the feeble-minded girls, and the border-line cases, of whom there must be a great many.

Mrs. Booth in her evidence said—

" The question of the illegitimate child of a normal average woman must be separated from that of the child of the feeble-minded woman. Those mentally deficient people ought to be, and we hope under the new law will be, more adequately protected, and men who take advantage of their helpless condition ought to be severely punished " (p. 52).

The Mental Deficiency Act of 1913 has done much, but there is no doubt that it needs to be strengthened if a period is to be put to the propagation of the mentally deficient.

D. Mortality of Illegitimate Children

I. *Analysis.*—Dr. Amand Routh says that: "Statistics point to at least a doubled still-birth rate in unmarried mothers, and there is strong evidence that, including criminal abortion, the rate of miscarriages is also about double in illegitimate cases. The infantile death-rate of the children of both married and unmarried mothers is also known to be in the same proportion, being respectively ninety-six and two hundred and seven per thousand births in 1917, and the infantile deaths during the first month of life in the same year were respectively thirty-seven and seventy-two.

"The following table gives an *estimate* of the probable loss of life between fertilisation of the ovum and the end of the first year of life.

Ante-natal and Infantile Death-rates per 1000 Births of Children of Married and Unmarried Women, including "Natal" Deaths, based on the Figures for England and Wales in 1917—

Ante-natal.	*Married.*	*Unmarried.*
In latter twelve weeks . . .	30	60
In former twenty-eight weeks (estimated)	120	240
	150	300
Infantile.		
Neo-natal (first month) . . .	37	72
Remainder of first year . . .	59	135
	96	207
Estimated deaths of children per 1000 births between conception and end of first year of life . . .	246	507
Actual deaths of mothers per 1000 births from causes connected with pregnancy and labour . . .	3·7	6·79

"It is therefore evident that the unmarried mother and her child need the care of the State twice as much as the married woman, if they are to be saved from this double rate of mortality and morbidity.

"How many of the 37,157 unmarried mothers and the babies born to them in England and Wales in 1917 were protected and helped from mid-pregnancy to the end of a six months' lactation? This should be one of our first reconstruction duties."

II. *Causes.*—Mrs. H. A. L. Fisher spoke of the causes of this high rate of mortality in her evidence.

"Now the causes which produce a high death-rate among infants also produce a high damage rate among those which survive the first year of life, consequently the population which results from a falling legitimate birth-rate and a stationary or increasing illegitimate birth-rate will tend (*ceteris paribus*) to deteriorate in quality. Clearly the other causes which we assume to be equal are very likely *not* to be equal, *e. g.* the lowered legitimate birth-rate may mean that more care is taken of the babies that are born, and this increased care may do something to counteract the deterioration in quality of the total population, which otherwise would seem likely to result from the fact that an increasing proportion of the total birth-rate was illegitimate. The causes of the higher death-rate among illegitimate infants are more or less familiar—a greater probability of infection from venereal disease, economic pressure, in a good many cases unsuccessful attempts on the part of the mother to procure miscarriage, maternal anxiety, all the heavy burden of want and trouble that the conditions surrounding the prospective mother of an illegitimate child involve" (pp. 45–46).

III. *Maternal Mortality.*—Obviously, maternal mortality is closely connected with infant mortality. The causes react upon one another, and the physical and mental hardships undergone by the mother, as well as in many cases the absence of the will to live, must tend to bring about a high death-rate among unmarried mothers" (see above table). There is undoubtedly a

great risk of infection from venereal disease. This is clearly shown in the statistics given in the evidence. It is, however, very difficult to obtain accurate figures with regard to this matter.

Death-rate from Syphilis (*Registrar-General's Report for* 1916).

Under one month.	*Under one year.*
While the death-rate among all infants is 0·50, the death-rate among illegitimate children is 2·52 and legitimate children 0·39.	While the death-rate among all infants is 1·57, the death-rate among illegitimate children is 9·31 and legitimate 1·18.

E. Effect of Legislation on Illegitimacy

Efforts to remove or lessen the various disabilities which illegitimacy entails upon both mother and child may be possibly regarded as likely to increase the number of births out of wedlock. In fact, it may even be urged that such changes would diminish respect for the married state and weaken the foundations of public morality; that some risk is inseparable from improved treatment of mother or child or both cannot be denied, but the practical question is whether the need for new methods of dealing with this most difficult problem is great enough to warrant their introduction, in spite of these possible ill effects.

It is impossible to view without compassion the present terrible mortality among illegitimates, nor can Society disregard the crying need for rescuing from all possibility of a subsequent life of vice girls who have fallen, but are anxious to lead a good life.

In dealing with the effect of legislation on illegitimacy we get further illumination through our being able to consider the Bastardy Acts already in practical operation

elsewhere. Mr. Newton Crane, Barrister-at-Law, in the course of his statement (pp. 161–170), put before us a succinct account of the Bastardy Laws in the United States of America, Australia, New Zealand and Norway, and we refer the reader to this valuable evidence.

F. Necessity for Action

The facts relating to illegitimacy are as follows. There has been no revision of the law in England regarding illegitimacy since 1873.

I. The helplessness of the illegitimate child should be protected by law, and the following recommendations therefore have been drawn up by the National Council for the Unmarried Mother and her Child—

1. That the Law of Affiliation should be altered by offering additional facilities to expectant mothers, both to enable them to make known their condition in the proper quarters and to take paternity proceedings; and also by relieving them from all costs of any such proceedings.

2. That provision be made for enabling a magistrate, on application by an expectant mother, to summon the parties before the birth of the child, and to hear the case in camera, and where paternity is admitted to make a final order.

3. That where an Affiliation Order has been made, payment of the weekly amount awarded be made to run from date of the child's birth in all cases, and, at the discretion of the magistrate, from a period prior thereto not exceeding two months. It shall be the duty of the State itself to institute proceedings for the enforcement of such payments, as if they were a State debt, and without charge to the mother. Failing enforcement of payment by fathers, adequate provision shall be made by the State before and after birth for the children of such necessitous mothers.

4. That the present limits of 10*s.* a week under an Affiliation Order be abolished, and the amount granted be in proportion to the circumstances of both parents.

5. That the subsequent marriage of the mother and father of the child shall legitimatise the child.

As a consequence of these recommendations there is now in active preparation a *Bill to amend the Bastardy Laws*, and to make further and better provision with regard to bastard children, and for other purposes connected therewith.

This is based on the Bill drafted by Mr. W. Clarke Hall, for the National Society for the Prevention of Cruelty to Children, and prepared by the National Council for the Unmarried Mother and her Child.

This Commission, without committing itself to all the details of the Bill, desires to support the principles of the Bill, and is in general agreement with it.

II. Secondary only in importance to the necessity for fresh legislation, so long overdue, in the interests of morality and of justice—is the consideration of the prevention—so far as is possible, of this crying evil of illegitimacy, so rampant in English life to-day.

The time is ripe for a change of attitude in this respect, and one of the most effective ways of dealing with it appears to be in the guidance of adolescents. It cannot be too strongly urged that the emotions of growing boys and girls should be trained and guided by parents and competent teachers, in order to avoid and counteract the general ignorance, and that half-knowledge which is even more dangerous. This matter was concisely summed up by Mrs. General Booth in her evidence (pp. 51–63).

III. Regarding the objection of a certain section of the public that better treatment would lead to an increase of the evil, we would remind those who raise this point of two facts.

One is, that the same objection has been made in advance of every reform tending to lighten punitive harshness against the offenders, even including the abolition of the death penalty for petty acts of theft.

The second fact is, that *this objection is not borne out by the known and tabulated results.* In Norway, where the unmarried mother and her child are treated more generously than anywhere else, the percentage of illegitimate births has notably declined. And in all countries where there has been an ameliorative legislation such as is now recommended, infant murder and the death-rate of infants owing to neglect have both been sensibly lowered.

IV. These are good reasons to press for immediate action by way of legislation and otherwise. There are, however, other reasons for regarding the problem of the illegitimate child as a national problem urgently calling for solution.

(*a*) The number of illegitimates shows no sign of decreasing.
(*b*) The mortality amongst illegitimate is double that of legitimate-born children.
(*c*) The nation cannot acquiesce in the destruction of children, legitimate or illegitimate.

The neglect and ill-treatment of an unmarried mother and her child tends to increase prostitution, poverty, crime and disease, and is a source of continual recruitment of the undesirable class by potentially worthy citizens.

V. It appears to be obvious, too, that present methods of dealing with the problems are quite inadequate and unsatisfactory. Judging by the reports of secretaries of associations dealing with individual cases, there is to-day urgent need not only for the immediate amendment of the Bastardy Acts to which we have already referred, but also for—

(*a*) More accommodation for the unmarried mother and her child.

(*b*) More efficient guardianship of the illegitimate child.

In respect of (*a*) an active and continuous campaign is required for the purpose of educating public opinion, and also to impress and explain the need for the public to insist that every possible use be made of any permissible means that already exist for obtaining more accommodation.

One of the greatest factors in helping these children is the mother herself. She should be with the child as much and as long as possible.

Carefully supervised hostels should be set up, in which mothers can care for their children and at the same time learn a trade, or become efficient in domestic work, while assured that their little ones are safe. These hostels should be homes, to which the mother may return at night.

As regards (*b*) there is little doubt that if a Bureau of Guardianship were established in this country, baby-farming and unsuitable foster-mothers would be impossibilities, and the unmarried mother would have a greater opportunity of regaining her position in social life than she ever had before. Her child would certainly be assured of his chance of becoming a worthy and useful citizen in the future.

III

NATIONAL AND INTERNATIONAL ASPECTS

The Present Danger

Great issues for the nation and the empire are involved in the steady decline of the birth-rate. Mr. Harold Cox, and other able men, who have given evidence before our Commission, plead for a much smaller population in Great Britain, and this in face of our terrific losses of

young manhood during four-and-a-half years of war. It might be thought that Great Britain might be a more comfortable place to live in with a population of, say, about 4 millions such as it possessed in 1570, than with a population of, say, about 45 millions, which it possessed in 1911, for then those existent would have plenty of room and money, and could feed themselves upon home-grown produce. But in the event of a war similar to that which we have just experienced, what would happen to us with a greatly reduced birth-rate? Surely all we have would be taken, and we must become slaves—as we should be to-day if we had entered on the struggle with Germany without adequate man-power. Moreover, what would happen to our Empire?

As it is, the position is most disquieting, both here and there, for the indications are that in the Homeland the population may not continue to increase, while in the Dominions oversea, without the aid of immigration, it will not, at the present rate, increase greatly, at least from additions of the British stock. We have the greatest area of responsibility in the world, one quarter of the whole earth, and it is still growing, but we are leaving it sparsely populated, though in it there is ample room for all whom we can spare from their places. All these enormous lands, with their countless native races, we hold with under 60 millions of white people, of whom 45 millions dwell in these little islands. But, unless we add to our numbers, for how long shall we be able to fulfil our obligations in the face of recent developments of race ambitions?

Extensive settlement upon the land would mitigate the evil, for there children are of value to their parents, but modern men and women will not settle in numbers on the land. As our own experience and that of Australia show, they prefer the city and the cinema. An appeal on Imperial grounds can be made

to the conscience of the inhabitants of the Empire, but it is doubtful whether it would have much effect, since each household will continue to be guided by its private character and circumstances and convenience.

The Need for Migration

There is great disparity between the density of population in England and Wales, and that in Canada and Australia. Many of the dangers and injuries to the race which depend upon extreme urbanisation and the dependence upon imported food would be removed by a more uniform distribution of our imperial population. Further, there are marked contrasts between the numerical sex ratio in various parts of the Empire, and the very large relative excess of women in the British Isles is a formidable problem for economics and for morals, being evidently dangerous to the institution and principle of monogamy, save at grave cost to many individuals. In the interest of racial morals we urge that the Imperial Government should direct itself to the more uniform distribution of the imperial population as a whole, and to the more equal distribution of the sexes. According to the statistical evidence placed before us during our first inquiry, the satisfaction of these requirements will mean that the emigration of young single men is against the imperial interest, but that the emigration of young women, under carefully-provided conditions, is to be encouraged.

A hopeful step in this direction would be the transfer from the Mother Country and the settlement in the Oversea Dominions of fit persons. It is clear from the evidence of the Vice-Chairman of the Oversea Settlement Committee [1] that judicious propaganda is required if the

[1] See pp. 367–372. Whilst this report was being printed the Oversea Settlement Committee issued a report (Cmd. 573) in which they submit the following recommendations—

(1) That the problem of oversea settlement should be discussed at

movement is to be successful; and from the evidence of the Commissioner of the Salvation Army [1] that difficulties exist which ought to be removed. To that end cordial co-operation between the Imperial Government and the several Dominion Governments, seems to be essential.

We cannot regard this as a suitable field for ordinary private enterprise or the play of unregulated forces; and we recommend that intra-imperial migration as a whole should be regarded as a matter of imperial health and safety, and should be controlled accordingly. The body responsible for it should be closely linked up with the Anthropometric Department of the Ministry of Health, for which we ask elsewhere.

An Appeal to Women Citizens

There seems to be one clear light among these shadows, in the advent of large numbers of women voters. If the new female electorate can be made to understand the

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the earliest convenient date between the Ministers of His Majesty's Government and of the Governments of the self-governing Dominions who are specially responsible for such matters.

(2) That with a view to making adequate the supervision which His Majesty's Government have decided to exercise over the arrangements in this country connected with settlement overseas and emigration to foreign countries, and with a view to co-operating adequately with the Governments of the self-governing Dominions in this the most important of all Imperial problems, they should be prepared to undertake annual expenditure, not exceeding in 1920–1921 £100,000, in addition to the expenditure to which they are committed by their undertaking to grant free passages to approved ex-service men and ex-service women. So far as can be foreseen future expenditure will not be such as to impose a heavy burden upon the British taxpayer.

(3) That they should as soon as possible introduce into Parliament, and secure the enactment of, legislation to empower the Oversea Settlement Committee to advise and assist intending settlers, to supervise and control passage brokers and agents, and also propaganda connected with oversea settlement or emigration.

[1] Pp. 356–366.

facts in their bearing upon the future of our race, they may, as a mass, bring pressure to bear upon individual selfishness and ignorance, and thereby effect appropriate changes in the attitude of the nation towards this vital problem. After all, the facts are simple, and may be summed up in the statement of the palpable truth that the greatness of an Empire consists not in the heaping up of wealth, or even in the establishment of universal comfort, but in the possession of multitudes of healthy men and women who will enable it to maintain its position and influence among the nations.

To the present generation these world-problems may appear far off and of little importance. But they do concern us, for ours is a glorious and a sacred responsibility, which we are bound in honour and in duty to pass on undiminished to those who come after us.

It is for the women of the Empire to save the Empire by securing its continuance for the fulfilment of its beneficent mission in the world.

Section III

THE LOSS OF INFANTS

A. CAUSES OF ANTE-NATAL, INTRA-NATAL AND NEO-NATAL MORTALITY

In discussing the mortality of these ante-natal, intra-natal and neo-natal periods, we must not forget that the children who may survive their first month of life, may be so abnormal that they will require continued supervision, or will certainly die later. This is of great national importance, for the Registrar-General, in his Report dated April 30, 1919, states "that infant mortality, measured by the proportion of deaths under one year of age to registered births in the quarter ending March 31, 1919, was equal to 149 per 1000, being 31 per 1000 births above the average in the ten preceding first quarters," and 53 per 1000 births above the average of 1917. This rise in infantile mortality would be very disquieting if it should continue.[1]

[1] The following figures, kindly provided by Dr. T. H. C. Stevenson, show great improvement in the statistics of the last three-quarters of 1919.

England and Wales

Quarter ended last day of	Registered Births.		Infantile Deaths.		Proportion of Infantile Deaths per 1000 Births.	
	1918.	1919.	1918.	1919.	1918.	1919.
March .	162,308	144,920	18,367	21,662	113	149
June .	170,239	148,824	14,194	11,877	83	80
September	168,451	175,367	14,234	12,332	84	70
December .	161,775	223,569	17,673	15,973	109	71
	662,773	692,680	64,468	61,844	97	89

We must also remember that the child's physical and mental condition is mainly the result of the parent's condition, and that the unborn child can only be treated through the mother; that whilst the maternal death-rate in married mothers in 1917 was only 3·7 per 1000 births, it is 6·97 in unmarried mothers; and that the main causes of maternal death in both classes are toxæmia, accidents of childbirth and puerperal sepsis, all of which largely preventable conditions seriously affect the child either before or after birth.[1]

Natural Increase of the Population

The *natural increase* of the population has for the first time in our statistical history ceased, for during the six months ending March 31, 1919, the deaths in England and Wales have exceeded the births by 126,445. It is true that influenza caused forty-one per cent. of the deaths in the quarter ending December 31, and twenty per cent. in that ending March 31, but as Dr. T. H. C. Stevenson, Superintendent of Statistics, states, "None the less, the more permanent and effective cause of the natural decrease has been decline in fertility, which even without influenza would have practically wiped out the whole normal excess of births over deaths for the six months."

The babies born in the quarters ending March 31 and June 30, 1919, were respectively 17,388 and 21,415 fewer than in the first and second quarters of 1918. This decline in fertility has occurred notwithstanding the fact that "in the whole year 1918 the total marriages in England and Wales (286,807) were the highest on record except in the boom years of 1914 and 1915."

The *conception* rate of a nation can only be estimated

[1] In 1918 the maternal mortality from causes connected with pregnancy and labour was 3·6 per 1000 births in married women, and 5·9 in unmarried women.

by adding together the live births, still births, and miscarriages, and these last are not known with any certainty. If, however, this large reduction of fertility be due to reduction in the numbers of conceptions which cannot be explained by enforced separation of husbands and wives, it must be explained by the increased use of methods of artificial conception-control, increased ante-natal mortality, or increased sterility, for, as already stated, the number of marriages is far in excess of the normal.

Percentage Causation of Ante-Natal Deaths

The approximate percentage causation of ante-natal, natal and neo-natal deaths derived from British and North American statistics can be given as follows with fair accuracy: prematurity, ten per cent.; syphilis, twenty per cent.; toxæmia, ten per cent.; prolonged, difficult or complicated labour, including ante-partum hæmorrhage, twenty-five per cent.; other known causes, ten per cent.; and "unknown" causes, twenty-five per cent. The fact that so large a percentage of the causes of ante-natal deaths is "unknown" shows how much research and pathological team-work is still required.

The proportion of ante-natal mortality to conceptions or to births is also difficult to estimate. Thanks to *compulsory notification of still-births* we know that the average number during the last twelve weeks of gestation in England and Wales is 30 per 1000 births, and statistics collected by numerous doctors and in various localities point to the probability that miscarriages between conception and the twenty-eighth week are about four times as many.[1, 2] If these estimates of miscarriages be correct, it means that there are 150 deaths of the embryo and fœtus per 1000 births during

[1, 2] See next page.

gestation.[1] Sometimes, women who have still-births do not have alternating miscarriages, but often they occur in the same women, as proved by Sir F. W. Mott and others, in cases of syphilis.

Causes of Death in the "Natal" or "Intra-Natal" Period

Dr. Ballantyne has wisely advised that this labour group of cases should be called distinctively "natal" or "intra-natal," and he further suggests that the mortality of this period should be considered separately, for not only does it include all the operations needed to save the mother in cases where there is a disproportion between the child and the maternal pelvis, but all the operations for other complications of child-birth,

1	Percentage to Live Births.	
Authorities.	Stillbirths.	Abortions.
England and Wales.		
Notification to Local Government Board, 1908–12, in 74 Large Towns and Boroughs . . .	3·06	
67 Small Towns	3·34	
Sir Wm. Priestley's Statistics .	—	30 % of all live births.
		16·6 % " " "
Dr. Whitehead's Statistics . .	—	23 % " pregnancies.
		14 % " "
Dr. Malin's " . .	—	19·23 % " "
Dr. Routh's " . .	2·8	27·4 % " "
		(patients).
U.S.A.		
Philadelphia (Dr. La Fetra) .	5	20
Boston (Mass.)	3·9	
Dr. Whitridge Williams . . .	—	16–20 % of all pregnancies.
Prof. Taussig (St. Louis) . .	—	30 % of all pregnancies.

For references see *Brit. Med. Jour.*, Feb. 14, 1914, p. 357.

[2] From an entirely different source (*Maternity*, pp. 194–5) Miss Llewellyn Davies has given figures derived from answers to inquiries from married mothers connected with the Women's Co-operative Guild. The figures are 59 still-births and 156 miscarriages per 1000 births, or a total of 215 deaths *in utero* per 1000 births, a much higher estimate than in the foregoing figures.

such as maternal hæmorrhage, pelvic tumours, fœtal malpresentations and pressure on the umbilical cord. Many malnourished, diseased, malformed, and premature children who fail to survive their birth also belong to this group.

If the child happens to breathe after its separate birth it would be considered a "live-birth," and its death would be called a neo-natal one. If it died a minute before its separation from its mother it would be a still-birth. If these "intra-natal deaths" of children between the onset of labour and the complete birth of the child were considered as a distinct class, it would be found that many children, known to have been alive at the onset of labour, die during those few hours.

Strong efforts are being made by obstetric teachers throughout the country to improve the practical side of midwifery training by providing more opportunities for attendance upon normal and abnormal confinements, and for the study of ante-natal complications, and for more adequate instruction and supervision of medical students and pupil midwives in their early attendances upon child-births.

The Neo-Natal Period

Dr. Ballantyne also suggests that the first month after birth should be designated "neo-natal," and the phrase is now generally adopted. In England and Wales the 25,044 deaths of this neo-natal period in 1917 included 37 per 1000 births of the children of married mothers, and 72 per 1000 births of the children of unmarried mothers, or about a third of those who died in their first year of life (64,483). These early infantile deaths comprise—

(1) Feeble, malnourished or premature children who survive their births, but fifty per cent. of whom die in the first twenty-four hours of life.

(2) Diseased children, such as those born syphilitic.

(3) Abnormal or deformed children, such as those born with hydrocephalus, spina bifida, ventral hernia or encephalocele.

(4) Many children who may survive some weeks who cannot suck owing to prematurity, cleft palate, hare-lip, or " snuffles " of syphilitic origin.

During this " neo-natal " period there are special risks to the premature or diseased child during the first few days of life, and also during the period between the obstetrician's attendance and the date when the pediatrician, or infant welfare doctor, takes on the care of the child. This " changing of horses while crossing the stream " may take place at the end of fourteen days, when the midwife usually ceases to attend, or after the mother and child have left the lying-in hospital, and it is the psychological moment when health visitors could usefully intervene. An inexperienced young mother thus suddenly turned adrift from advice and help needs special care and sympathy. Nothing like it occurs in private practice where a doctor continues his attendance. Dr. Mona Chalmers Watson has recently proposed that lying-in hospitals should arrange to keep mothers after their first confinement in hospital for four weeks instead of two, for health purposes, as well as to teach the mother how to manage her child. It is a wise suggestion.

Premature Births

The proportion of premature births to the total births in lying-in hospitals varied in 1914 from 12·9 per cent. (Queen Charlotte's Hospital,[1] London), to 20·4 per cent. (St. Mary's Hospital,[1] Manchester), and of these 30·4 per cent. and seventy-four per cent. respectively died

[1] Premature births, in the above-named two hospitals, are so-called if they occur before the thirty-eighth week of gestation.

before their mothers left the hospitals, and it is calculated that over fifty per cent. of such premature children die during the first twenty-four hours of life. Some of these premature deaths would, therefore, occur in the "natal," some in the "neo-natal" period.

The causation of prematurity has not been satisfactorily worked out, but is often due to ante-partum hæmorrhage, toxæmia, or undue physical effort or mental strain in the mother, or to malnutrition or morbidity in the child, which conditions, rather than the resulting prematurity at birth, should be viewed as the primary causes of the fœtal death.

Venereal Disease

Amongst the main causes of death of the child in both early and late pregnancy is syphilis, which is dealt with in the part of our Report dealing with Venereal Disease (p. cv).

Toxæmia

(*Chemical Poisons in the Blood*)

The toxæmias of pregnancy are due to unknown chemical poisons, produced by complex processes at, or near the points of union of mother and child, and they attack different organs with unexplained discrimination.

Maternal toxæmias are said to occur in five per cent. of primigravida, and are still more frequent in unmarried women, who have to endure much more mental strain during their pregnancies.

These chemical poisons in the maternal blood are also present in the fœtal blood, and are the cause of from ten to fifteen per cent. of fœtal deaths, either in the more virulent forms of maternal toxæmia, such as during the convulsions of pregnancy, when the child is usually expelled still-born, or in the minor maternal

toxæmias, by the continuous circulation of chemical poisons in the fœtal blood. The child may die during the ante-natal, natal or neo-natal periods.

Many cases of gradual toxæmia can be detected early enough to enable treatment to be successful. To combat the most virulent and sudden types no specific treatment is yet known. Research alone can discover the nature of these poisons and can point to the antidote or other specific means of treatment.

Accidents and Complications of Child-birth

These account for a very large group of ante-natal, intra-natal, and neo-natal deaths. Pelvic contractions, or tumours, or fœtal malpresentations are not only dangerous to the mother if the condition is recognised first during labour, but are still more dangerous to the child, who may have to be sacrificed to save the mother, for obviously if the mother cannot be delivered both mother and child die.

A large proportion of the deaths of mothers and infants at lying-in hospitals occur from these pelvic conditions, which if recognised during pregnancy could have been safely dealt with at a pre-determined date by manipulation or operation, but would be accompanied by risk if the patients are only admitted during labour, especially if fruitless attempts at delivery have been made, and the mothers are already septic.

Operations are often necessary in the treatment of those complications. Taking the 1914 statistics of the two British lying-in hospitals already named, in a total of 591 operations which had to be performed to save the lives of mothers and children, twenty women and 174 of the children died. The percentage of deaths of these mothers and children, in spite of the operations done to save them, were thus 3·1 and 29·4 *per cent.* respectively, ten times greater than the usual total

maternal death-rate of 3·7 *per* 1000 *births*, and the usual natal and neo-natal infantile death-rate of 37 per 1000.

In cases of *pelvic contraction*, previous recognition, even of minor contraction, is most essential to the safe delivery of a living child. Among these 591 operations there were 218 cases of contracted pelvis which required operations such as induction of labour (65), forceps delivery (44), version (7), craniotomy (32), and Cæsarean section (70). Seven mothers (3·2 per cent.) and 58 of the children (26·6 per cent.) died, the death-rates corresponding closely with those of the total 591 operations for all causes.

Humanly speaking, if a careful doctor or midwife had discovered these pelvic contractions during mid-pregnancy, and the woman had been admitted at a suitable time to a lying-in hospital where expert advice and treatment were forthcoming, very few, if any, mothers or children would have died. Deaths from these causes occur in the intra-natal and neo-natal periods.

Maternal Hæmorrhage before Child-Birth

Maternal hæmorrhage (such as those due to *placenta prævia*[1] and *accidental hæmorrhage*,[2] especially the concealed variety), are the most fatal to the child of all complications if not treated promptly. Thus, in these two lying-in hospitals in 1914, out of 119 cases of these hæmorrhages before or during child-birth sent in for treatment, 8·4 per cent. of the mothers and seventy-five per cent. of the children died. The mortality in this group of cases, where there has been no

[1] The "placenta" (or after-birth) is said to be "prævia" when it is situated in the lower segments of the womb. During the necessary separation of such an after-birth, to enable the child to be born, "unavoidable hæmorrhage" spontaneously occurs.

[2] "Accidental hæmorrhage," which may be internal and entirely concealed, is due to the separation, or partial separation, of a normally situated placenta or after-birth.

expert medical advice during early labour, and no available lying-in institution where the sudden emergency can be adequately dealt with, is terrible to contemplate. Deaths from these causes occur in each of the periods we are considering. It has recently been demonstrated that some of these accidental hæmorrhages are toxæmic in origin, and as such, therefore, potentially preventable.

Among *other obstetric complications of pregnancy* which could be discovered in early or mid-gestation, before they had become serious, may be named retroversion [1] of the gravid uterus (a frequent cause of abortion about the fourth month), pyelitis [2] of pregnancy, degenerations of the chorion [3] (the causes of which are for the most part unknown), excess of liquor amnii.[4]

Nothing but adequate provision of ante-natal clinics and lying-in institutions, with improved practical training of medical students and midwives, will enable these and other complications of pregnancy to be discovered and dealt with.

All these important matters are being dealt with more or less successfully by the formation of schools for mothers throughout the country for the instruction of mothers and expectant mothers, and by the multiplication of maternity, ante-natal, and infantile welfare

[1] In these cases the displacement of the enlarged womb prevents it rising out of the pelvis.

[2] The "pyelitis" of pregnancy is a purulent inflammation of the pelvis of the kidney and of other parts of the urinary tract, due usually to infection by germs (Bacillus coli) habitually present in the bowel.

[3] "Degeneration of the chorion." The chorion is one of the fœtal developing membranes, endowed at a very early stage with blood-vessels which supply nourishment and oxygen to the growing ovum. If it becomes cystic or otherwise degenerative, development of the ovum ceases, and the uterine contents are expelled.

[4] The "amnion" is the inner of the fœtal envelopes, and contains a fluid, the main use of which is to protect the growing fœtus from pressure and from external jars or shocks. Excess of this fluid is associated with serious fœtal debility and mal-development.

centres and clinics in both urban and rural centres. By these means expectant mothers are brought under medical observation, and danger symptoms are noted and dealt with. Maternity hospitals, and additional beds in existing hospitals for both normal and complicated labours, and for ante-natal illnesses, are being constantly increased. It is recognised, however, that until sufficient beds and adequate transport facilities for getting patients admitted are available to enable every case of doubt, difficulty or complication to receive expert advice and treatment in properly equipped institutions, the lives of mothers and children will continue to be sacrificed by—

(1) The absence, or inadequacy, of medical supervision of pregnant women; (2) the failure of early recognition of complications at onset of labour; (3) the frequent impossibility of getting expert advice when, perhaps late in labour, the complication is recognised; (4) impossibility often of getting the patient promptly transported to a lying-in institution where anæsthesia, expert medical and surgical treatment and skilled nursing of mother and child are available.

Other Miscellaneous Causes of Fœtal Death

There are other maternal causes of fœtal disease or death which could often be successfully treated if detected during pregnancy. We need only mention heart disease, Bright's disease, lead poisoning, alcoholism,[1] local malignant disease, acute specific fevers, pneumonia and other acute and chronic lung conditions, as well as accidents causing injury, shock or fright. Criminal abortions in the first three months are not infrequent, especially in the unmarried.

Apart from facilities for diagnosis and treatment,

[1] Pp. cxxx and cxxxvi–cxlvi.

research centres and pathological laboratories are needed in all districts, so that the obscure details of ante-natal pathology may become known, and measures of prevention be rendered available.[1]

B. INFANT MORTALITY

Infant mortality is the technical term used in vital statistics to indicate the deaths of babies alive at birth, but dying within the first year of post-natal life. The term infant is here strictly employed to indicate a child within its first post-natal year. (See statistics for 1919, p. lxxvii.)

In all times and places there is a considerable mortality amongst infants. The infant mortality rate in vital statistics is the number of infants dying per thousand born. This figure is open to fallacy in exceptional times, as, for instance, when a marked and sudden fall in the birth-rate has affected the number of infants actually alive in a population during the following year, so that the infant mortality rate may give too high a figure for the actual mortality among infants at that time; but in general this rate is a useful and trustworthy one, not requiring that correction or standardisation without which it is impossible to understand a birth-rate or a death-rate.

The first statistical question to which students of the birth-rate must address themselves in this connection is the relation of infant mortality to the birth-rate. It is the contention of the neo-Malthusians that the general death-rate, of which the death-rate of infants is always a major factor, varies as the birth-rate. Numerous instances may be found of this high positive correlation between the birth-rate and the general, including the infant, death-rate.

[1] See Dr. Sullivan's memorandum on Alcoholism in relation to the Birth-rate (p. cxlii).

This matter was discussed in our previous Report to some degree, but requires further notice here. The inference commonly drawn from this high positive correlation is that the rise or fall in the death-rate is a consequence of the rise or fall in the birth-rate. We do not find, however, that this assumption is warranted. There are many instances which widely diverge from the customary correlation—instances on a large scale and maintained over very prolonged periods. It is not necessary to go outside of the United Kingdom for one of these. In the city of Bradford infant mortality ranges about the figure 135, with a birth-rate extremely low, falling indeed in 1918 to about 13. The birth-rates before the war were higher than this, but extremely low. In Connaught there are the largest families in these islands, the standardised birth-rate ranging from 45 to 50. Infant mortality is almost incredibly low, the customary figure for County Roscommon being in the neighbourhood of 35. The neo-Malthusian contention that the cause of a high death-rate is a high birth-rate, and that the only way in which to reduce the death-rate is to reduce the birth-rate, is clearly invalid, in view of such an instance as this.

A no less formidable objection to the neo-Malthusian view, as indeed to nearly all unexamined views of infant mortality, appears directly we look at it in its natural relation rather than as an isolated figure. It is easier to do this now than it was at the beginning of the present century, before the modern campaign for the reduction of infant mortality was inaugurated. At that time the main evident factor in the mortality was summer diarrhœa, occurring chiefly in the third quarter of the year. There has, however, been no epidemic of summer diarrhœa in this country since 1911.[1] Though the heat and drought of the summer quarter of that

[1] In that year the strike complicated the supply of milk to cities.

year—the meteorological features associated with summer diarrhœa in the past—recurred in 1919, not only was there no epidemic of summer diarrhœa, but the figure for the third quarter was only 70, the lowest ever recorded in England and Wales for any quarter of any year. The substantial conquest of summer diarrhœa, which has been paralleled in the United States of America, has saved the lives of large numbers of infants who would have died in the later months of the infantile (not the calendar) year. The practical removal of that epidemic and quasi-adventitious factor enables us to see infant mortality in its true relations.

We have seen the seasonal incidence; observe now the age-incidence of infant mortality. The curve of mortality as now seen falls with great rapidity from the first day, week, month, of life onwards. Neo-natal mortality [1] has diminished only inappreciably in this country during the present century, whilst infant mortality as a whole has been diminished by a third. Evidence has been given by Dr. Saleeby from personal inquiry in Washington to the effect that the same phenomenon is found in the United States (see p. 406).

The causes of neo-natal mortality are in the main ante-natal and intra-natal. This reminds us of the high mortality before birth, estimates of which, according to Dr. Amand Routh and others, show it to be considerably higher than the mortality after birth. In other words, we find the curve of the age incidence of infant mortality, which is high at birth and descends therefrom, to be only the second portion of a mortality curve which, taken as a whole, was higher still before birth. The problem of early infant mortality is a problem of maternity. That is the conclusion we reach on looking at it in its natural relation, as was said above, and not as an isolated figure.

[1] That which occurs in the first four weeks of post-natal life.

The older and more familiar evidence for this view is to be found in the numerous statistics contrasting the death-rates of breast-fed and artificially fed infants. New considerations have now been brought before us by one of our members, Dr. Eric Pritchard (see p. 372), which show not merely that human milk is superior to any other food for the infant, but also that the milk of its own mother, other things being equal, is vastly superior to that of any other woman. Though much has been written on the importance of lactation, we think it desirable to insist yet further thereon, and in the first place the physiology of this function may be briefly outlined as follows—

Lactation

The function of Lactation is the secretion of milk in the glands of the breasts.

Each breast contains about twenty lobes radiating from the nipples, and each lobe is divided into lobules, containing gland-cells lined by epithelium and nourished by blood-vessels. The secretion from these cells is received into small ducts which open into larger ducts and eventually find their exit at the nipple.

The changes which take place in the breasts during pregnancy are gradual and free from pain, but after the birth of the child, and in a minor degree after the earlier expulsion or death of the fœtus, a more active phase occurs and some discomfort ensues.

These functional changes are of bio-chemical origin, due to unknown products derived from the uterine or fœtal metabolism, which stimulate the cells of the mammary glands.

In the earlier months of pregnancy the glands secrete a clear watery fluid, but towards the end of pregnancy and for the first few days after labour a creamy fluid is secreted, the result of fat globules being formed in

leucocytes and cell-epithelium. This is called colostrum and acts as a slight purgative to the child after birth.

On the third or fourth day after labour the glands in the breasts become very active, and the breasts become swollen and tender, showing that true milk is being secreted. This is a physiological process and should be unaccompanied by feverishness.

The milk normally consists of a watery solution of proteins (casein and lact albumen), sugar (lactose) "vitamines," salts of lime, sodium, potassium and magnesia, with fat globules suspended in it in the form of an emulsion. These ingredients vary much in different women, and at different times, according to the diet, exercise and psychical condition of the mother.

If the mother be poorly fed, the milk suffers, though not as much as might be expected, for the tissues of the mother are drawn upon in a remarkable manner in such an emergency, in order to enable the cells of the breast to secrete normal milk.

Emotion (such as anger and fear), shock and hysteria, have more effect on the secretion of milk, both as regards its quantity and quality, than the physical condition of the mother; neurotic and emotional women are not good nursing mothers. A placid, happy disposition, fresh air, bowel regularity and moderate exercise, encourage lactation. Alcohol should be avoided. Its use does not help lactation.

Every woman, married or unmarried, should nurse her child, unless she suffers from such diseases as tuberculosis, recently acquired syphilis, insanity, severe anæmia after hæmorrhage, puerperal fever, or from some breast or nipple complications, or unless there be certain disabling defects or immaturity in the child.

Lactation encourages normal involution of the womb and of other tissues involved in the processes of pregnancy and labour.

Lactation, especially if the mother is a happy, contented woman, able to rest, and not burdened with undue household cares, has an enormous educational influence on the child. The child looks to the mother for what it needs most, and, having obtained it, quietly sleeps till another time of need arises. This close mutual attachment has an important influence in fashioning the early mental and moral development of the child. Virtues such as obedience, reverence, patience, endurance and punctuality can be gradually inculcated by a wise and sympathetic nursing mother during a six months' lactation, and the future character of a child may thus be unconsciously created.

Lactation should be continued for at least six months, unless the mother or child is losing weight or vitality.

Indications for gradual weaning are, in the child, the appearance, at about the seventh month, of the lower central incisor teeth, especially if the upper incisors also are being cut; and, in the mother, the reappearance of menstruation, as ovulation may then be assumed to be recurring.

Weaning, apart from the above considerations, should be established by the ninth month, so that pregnancy and lactation would occupy a year and a half, and even if conception should take place in the next two or three months, nearly two years would elapse between the birth of children, which may be assumed to be Nature's "spacing" between child-bearing.

Women, who for inadequate reasons refuse to suckle their offspring, and those who prolong lactation to one or even two years in the hope of preventing conception, are alike culpable.

The suppression of the normal function of lactation unquestionably hinders uterine involution, lessens the mutual attachment of mother and child, makes the child's earlier months more liable to digestive disturb-

ances and infections, which lead to so much infant mortality, and usually prevents a child from getting the most appropriate diet, both for organic and for functional development.

If a woman's object in avoiding lactation be a selfish one, she will almost always show further evidence of her selfishness by artificially avoiding another conception at the early date which absence of lactation would otherwise render probable. Women who suckle their children are less likely to employ contraceptives. Women in the upper and middle classes who refuse to suckle frequently employ some variety of conception control.

On the other hand, the continuance of lactation beyond nine months, or after menstruation has reappeared, involves a gradual deterioration of the quality of the mother's milk, with consequent impaired vitality in the child, and anæmia and lassitude in the mother. Often, too, the mother suffers from depression which may pass into the melancholic type of insanity of hyper-lactation.

It must be noted, too, that prolonged lactation does not necessarily prevent conception, for women may become pregnant whilst suckling, sometimes even without intervening menstruation. In such cases the double drain upon the woman of lactation and pregnancy is obviously injurious to herself and to both of the children for whom she is simultaneously providing nourishment.

A Special Report (No. 38)[1] has been recently issued by the Medical Research Committee of the National Health Insurance on *Accessory Food Factors* (pp. 50, 71, 78, 90), showing that the dietary of the nursing mother is of much greater importance than has hitherto been

[1] See also *Lancet*, January 3, 1920. Letter by Dr. C. W. Saleeby.

recognised. It now appears that one of the special virtues of milk is its content of the so-called vitamines. These, which are essential for the baby, are, however, not made by the maternal body, which obtains and transmits them from food which contains them. Thus, though a mother nurse her infant, it may nevertheless develop rickets if she be wrongly fed; and there is evidence to suggest that more rickets is produced among children in the winter than in the summer, because the diet of cows in the winter is less fresh and natural—that is to say, less rich in vitamines, which are ultimately derived from green leaves. If it should be supposed that we are straying outside our province at this point, the fact may be recalled that the production of rickets in one generation, as thus, is directly a factor in the lowering of the birth-rate in the next generation, the birth of living children being difficult, hazardous, or impossible when they are required to enter the world through a rickety pelvis. Further, these considerations of the dietetics of lactation must naturally lead us to study as never before the dietary conditions of gestation or of ante-natal life, which may be found to bear closely upon that very large proportion of still-births hitherto unexplained (see p. lxxix). This is indeed only one more illustration of the truth that the more we study the infantile year and its conditions, the more clearly do we see it to be, as regards life and death, health and disease, infection, immunity and intoxication, the vital sequence, and in large degree consequence, of ante-natal life and its conditions. The problem of infancy is, for us viviparous mammals, the problem of maternity, and the present section is to be regarded as a less important addendum, or Part II, of the section of the Ante-Natal Period (p. lxxvii).

We are satisfied that, under proper conditions, even modern, civilised, educated woman, or, at least, she

who can bear a living child, can also, nearly always properly perform the function of lactation. The establishment of those conditions is, in our view, a first necessity of racial maintenance. *Le lait et le cœur d'une maman ne se remplacent jamais.* We cannot at present attempt the large and fundamentally important task of defining and analysing those modern conditions, physical and psychical, economic and sociological, which at present interfere with the function of lactation, but that task must certainly be undertaken as soon as possible. Here we only assert that, whatever changes in any order of things be found necessary for the return to that principle of infant nutrition which is characteristic of the entire mammalian order, those changes must be made, at whatever cost to whatever other interests.

Reference has been made to the very striking reduction of infant mortality during the present century. The causes of that reduction require statement in order that we may judge of their future potency. They are many and, in some degree, various. Amongst them are maternal lactation, the greater care taken in the milk supply for infants, the use of dried milk, the limitation of the infection of food by flies—thanks partly to the substitution of the motor-car for the urban horse—the almost total disappearance of the long-tube feeding-bottle, and the work of many devoted persons in the numerous maternity and child-welfare centres which now exist. Two of our witnesses represent what may be looked upon as opposite, but are in truth complementary aspects of the modern movement. For each method much success may be claimed, each working to save the infant through the mother, its natural saviour. Mr. Benjamin Broadbent, the illustrious, practical pioneer, advocates sending visitors to the home to help the mother (see p. 386). The alternative

method, as we may think it, is to ask the mother periodically to bring her infant out of their home to a maternity centre. There is need for both of these methods. The true balance and relation between them has yet to be determined, varying, as it necessarily must, under different social conditions; but doubtless the true maternity centre is the home itself, if indeed we may not say that it is found within three concentric circles, the circle of the home, the circle of the mother's arms and "the circle of the breast."

Finally we must draw attention to the failure of our present methods to diminish neo-natal mortality in any considerable degree. With this may be correlated the no less significant fact that, whilst infant mortality in this country has been reduced by about a third during the present century, that reduction was obtained comparatively soon, and the rate of progress has certainly not been maintained. That, of course, could not be expected, but the conclusion which we must reach from the figures, especially in view of the parallel course of events on the other side of the Atlantic, is that the attempt to deal with infant mortality, as it now remains, will not succeed merely by further effort on the present lines. The abolition, or even the great further reduction of infant mortality, can only be achieved by the hygiene of motherhood, and that is not essentially a medical problem, as is shown by the contrast between Connaught, where the medical and economic conditions are deplorable, and Bradford, where those conditions are probably the finest in the world, but where, owing to social causes, there is very little breast-feeding. Since the Bradford mothers, unlike the Irish peasant mothers, do not lead their real lives in their houses, those houses never become homes, in which alone, whether their walls be of clay or of marble, the human race can be reared. Among the causes of neo-natal morbidity and

mortality are chiefly the racial poisons, especially syphilis and alcohol. Behind the operation of these causes, as of artificial feeding, lie social factors. Those social factors, when themselves considered, will be found to be moral rather than social or economic in the ordinary senses of those terms. They depend upon conduct, and not only, as is evident, that of, for instance, the husband who infects his wife and thus their infant with syphilis, but also upon the conduct, the ways of thought and of deed, of many other persons and of all classes. The tragedies of maternity and infancy to-day, and their consequences, as they will be, have their roots in the failure, and can be ended only by the practice, of what we may call Racial Morals.

C. THE MILK SUPPLY

It is hardly necessary to emphasise the importance of a pure and adequate supply of cows' milk as an essential factor in the rearing of healthy children after the period of natural lactation and in the maintenance of the mother's health during lactation. The Committee, therefore, determined to hear evidence from experts as to the quality of the milk now supplied to the public and as to the need for improved administrative control as regards production and distribution of milk.

Accordingly, the following witnesses were heard: Dr. G. Reid, O.B.E., Medical Officer of Health, Staffordshire County Council, as to the quality of the present supply and the need for reform as regards administrative control; Mr. Foulkes, Principal of Harper-Adams Agricultural College, Shropshire, as to the all-round advantage of keeping cows as far as possible in the open, or in freely ventilated sheds; and Mr. Watson, Engineer of the Birmingham and District Drainage Board, as to the elimination of tuberculosis among cattle.

Whilst we were considering our Report on the evidence which we had heard regarding the milk supply, there was published the extremely valuable Final Report, 1919 (Cmd. 483), of the Committee on the Production and Distribution of Milk. We desire to draw further public attention to that document and to its important recommendations, with which we are in general agreement. Many of the problems of ante-natal and infant mortality, and of rickets in its relation to intra-natal mortality, to which we refer elsewhere, depend for their solution, in important degree, upon the adoption of those recommendations.

We do not, however, consider it superfluous to supplement the comprehensive Official Report, which must be the principal document on this subject for many years to come, with our own conclusions, especially in relation to the particular evidence which we have heard.

The complacency with which the present serious situation is viewed by the public is an extraordinary example of the tolerance of avoidable injury. For many years, in season and out of season, health officers have spared no effort to stir up public opinion to the point of demanding a pure supply, and they have been supported in their efforts by the public press. Commissions have sat, and their reports as to the injury to health for which present practices as regards the production and distribution of milk are responsible are conclusive. Acts of Parliament have been passed and Orders have been framed which, had they been rigidly, intelligently, and uniformly enforced, ought to have fulfilled their purpose, but as the efforts of one local authority to enforce the law may be defeated by the want of effort and entire disregard of their duty in this respect on the part of another, the practical result may be said to be nil. Thus what ought to be the cleanest and most wholesome of all our foods remains the dirtiest

and most noxious, responsible in a staggering degree for the present high mortality among infants and children, and for the maiming or disfigurement of others who suffer but who survive.

It has been found to be useless to discuss the subject with farmers, who, with few exceptions, are hide-bound by erroneous tradition regarding the housing of cows and completely indifferent to the need for all-round cleanliness. Dr. Reid's utmost efforts failed in inducing even one farmer in Staffordshire to make use of the side-inlet milking-pail so largely used in America, a simple substitution which, it is estimated, is instrumental in reducing the dirt in milk by no less than eighty per cent. Further, they still firmly believe that a high yield of milk can best be secured by keeping cows in as nearly as possibly hermetically-sealed sheds, and they profess to believe that tuberculous milk may be consumed with impunity. As regards the latter belief there is no need to waste time in refuting it, but as regards the former, certain reliable experiments on a large scale prove that this, like many common traditions, is entirely fallacious, and that it is advantageous from every point of view to keep milch cows as far as possible in the open all the year, or, when not in the open, in well-ventilated sheds.

The first experiment was conducted at the Harper-Adams College, an institution which is maintained jointly by the County Councils of Stafford and Salop, and was repeated each year for four years, 1901–1904. Detailed figures were submitted to the Committee which showed that the results were superior in every respect, namely, volume of production, quality, cost of production, and increase in live weight of animal, in the case of the herd of cows kept entirely in the open during the winter months as compared with the results in the case of the herd which was housed and only

turned out during the day when the weather was fine. To quote Mr. Foulkes, the Principal of the College—

"The first season's results were so contrary to ordinary opinion that trials were repeated for the following seasons. In each year of the trials there were extremes in the climatic conditions during the time the cows were kept out-of-doors. The rainfall varied considerably, and the temperature fell below freezing-point for half the length of the trials and on one occasion twenty-five degrees of frost were registered. . . . The results are decidedly in favour of leaving the animals out at pasture during the night and, from the fact that there was a greater increase in live weight when the animals were turned out, it is apparent that they did not suffer by the treatment."

In confirmation of the results quoted may be mentioned another experiment, which was started two years ago at the same institution, and is still going on, with the object of testing the output of milk by the soiling system, a system which requires that the cows shall be kept indoors. Having proved by the previous experiments the advantages of the open-air life, it was determined for the purpose of this experiment to erect special sheds, which would conform as far as possible to open-air conditions. Accordingly, the sheds were constructed of wood with three-quarter inch interspaces between each board, an arrangement which, as experience proved, kept out the wet and, at the same time, allowed of the free circulation of air. During the whole time this experiment has been in operation, although the cows have been kept practically in the open throughout, they have remained in excellent health.

The Harper-Adams College experiments have been confirmed by similar experiments conducted on a large scale in several parts of Scotland under the auspices

of the Highland Agricultural Society, and in America under the auspices of the Pennsylvania State Agricultural College.

From the point of view of tuberculosis it is impossible to over-estimate the advantage of the housing of cattle under conditions as nearly approaching those of the open air as possible, but to eradicate the disease entirely, which is quite practicable, further measures are necessary. We owe what has been done in this direction hitherto, however, to the action of a few enlightened individuals on similar lines to those recorded as follows—

At one time the sewage of Birmingham was disposed of by land treatment, but this method was ultimately given up in favour of artificial filtration, the works being designed by the resident engineer, Mr. Watson, under whose able management they still remain. The land hitherto irrigated by sewage is now used for agricultural purposes, including milk production, and, although Mr. Watson is not a farmer, but merely an intelligent man with a conscience, he determined that he would not be a party to the distribution of milk to the injury of the confiding, though ignorant, public.

Mr. Watson began his operations in 1908, when he found that no less than sixty per cent. of the milch cows and twelve per cent. of the heifers responded to the tuberculin test. The method adopted was to segregate, fatten, and sell responding animals to the butcher, the employment of the test, twice annually, enabling the discovery of the tuberculous animal to be made before the probable existence of the disease became apparent clinically. The herd was maintained by breeding from non-responding animals and all were reared and kept under, as nearly as possible, open-air conditions. For the first two or three years the rate of reduction in the number of responding animals was comparatively slow, but, subsequently, it fell rapidly

to vanishing point, with the result that for the past five years not a single responding animal has been detected. In other words, the herd has been entirely and, apparently, permanently freed from tubercular disease.

What we desire to arrive at might be achieved under the new Milk Bill, which will soon come into operation, providing it is really put into effective operation. There is one condition, however, which must be complied with if success is to be hoped for, and that is that the veterinary officers employed in the work must be absolutely independent of local influence if they are to discharge their duties fearlessly and in the public interest. This essential can only be secured by the appointment of whole-time officers who may not be displaced except with the approval of the central authority. Also, they must have at their disposal well-equipped and properly staffed laboratories, where the work which is essential to the proper carrying out of their duties may be conducted. Possibly the work of tuberculin testing might be entrusted to less highly trained officers under the control and direction of the veterinary experts.

In a large area the authority of which, in their administration of the Tuberculous Order of the Board of Agriculture, did not pay regard to the essentials just referred to; in the first place a special Committee with executive powers was appointed to administer the Order, and, as the question was one of milk supply, this Committee was constituted largely of farmers. The Medical Officer of Health submitted a report regarding the needful machinery and its working, in which he predicted that the Order would not fulfil its purpose unless the veterinary surgeons appointed were whole-time officers. This prediction was disregarded, however, and the practising veterinary surgeons throughout the area were appointed.

In other words, men whose success in life depended upon their retaining the good will and support of their private clients were appointed to adjudicate between those clients and the State, and to form unbiassed opinions on matters which affected their clients' pockets. Far from fulfilling its purpose, even to a partial extent, the Order was made an instrument for compensating farmers for the slaughter of dying animals.

The Commission recommend that in the event of the Tuberculosis Order of the Ministry of Agriculture and Fisheries being revived, it should be made obligatory on those Authorities who administer the Order to appoint whole-time veterinary officers whose success in life does not depend upon retaining the goodwill and support of private clients, between whom and the authorities they will have to adjudicate on matters affecting the personal interests of the former.

Section IV

CONTRIBUTORY CAUSES OF LOSS OF POPULATION

A. VENEREAL DISEASE

The two main types of venereal disease are syphilis and gonorrhœa.

Ante-Natal Syphilis

Congenital syphilis was first described by Ambroise Paré in 1633. It is now known that, in addition to its influence on deaths during labour, it is the most important and frequent cause of abortions and premature births.

The recognition of syphilis in the still-born fœtus, in the expectant mother and the new-born child, is now much easier than it was ten years ago.

This has been due to (1) the discovery of the infecting organism, the *Spirochæta pallida*, by Schaudinn and Hoffmann in 1905; (2) the means of diagnosis by testing the blood for the Wassermann reaction in 1906, and (3) the great advance in the pathology and treatment of syphilis due to the discovery by Ehrlich of salvarsan and its substitutes, which have the power of destroying the spirochæte of syphilis without injuring the tissues of its host.

It has already been stated, in the part of the Report dealing with the ante-natal period, that during the last twelve weeks of gestation there are known to be thirty still-births per thousand births in England and Wales,[1]

[1] Royal Commission on V.D. Final Report, pp. 11–12, pars. 26–28. Reports of Medical Officer to Local Government Board, 1914–1915, Cd. 8085, p. 48.

and it is estimated that there are about 120 abortions and miscarriages in the previous twenty-eight weeks.[1, 2]

The general causes of these deaths *in utero* have been also stated. From a careful consideration of such statistics as have been published it is estimated that in *urban districts twenty-five per cent.* of the total ante-natal deaths and deaths during the first two or three weeks after birth, are due to syphilitic infection of the fertilised ovum or fœtus, and that probably twenty per cent. would be a fair percentage over the whole of England and Wales. This would mean that about 27,000 deaths occur annually in England and Wales from syphilis during the ante-natal, intra-natal and neo-natal periods.[3]

Many of the children who perish in the intra-natal period die because they are infected by congenital syphilis, and are unable to survive the strain of birth. Such debilitated children also form a large proportion of the thirty-seven per thousand births (25,044)[4] who died during 1917 in England and Wales in the neo-natal period (first month of life), and especially of those who died during the first twenty-four hours (7377, 11 per 1000 births), or those who died in the next seven days (8355, 12·6 per 1000 births).

[1] "Ante-Natal Hygiene," by Amand Routh, with Statistics and References regarding Still-births and Abortions, *British Medical Journal*, Feb. 14, 1914, p. 356. See also Ante-Natal Mortality, part of Birth Commission Report, p. lxxvii.

[2] Memo.: The Royal Commission on V.D., in their Final Report (p. 21, par. 63) considered, "that the notification of still-births should be extended to include an earlier period of pregnancy than twenty-eight weeks."

[3] Statistics are recorded regarding the still-births in 10,000 consecutive labours in each of two American hospitals (John Hopkins Hospital and Sloane Hospital). In the former the still-births due to syphilis were shown to be thirty-two per cent. of the total deaths up to fourteen days after birth; and in the latter nine per cent. of the still-births were syphilitic, though all recognised cases of maternal syphilis were refused admission.

[4] The total infantile deaths up to one year of age in 1917 were 64,483, or 96 per 1000 births. Total births, 668,346.

In addition to those infants who thus die, a large number of children show no evidence of syphilis till some weeks after birth, and some remain apparently healthy till puberty or early adolescence, when cerebro-spinal and other forms of disease may become manifested.

It is difficult to estimate the incidence of syphilis in the population, but in 1914, Dr. Paul Fildes [1] investigated 1002 cases coming as adult patients to the London Hospital (males 616, females 386). Only those who had no symptoms of syphilis were included among those examined by the Wassermann test by Dr. Bulloch, F.R.S., with the result that 10·3 per cent. of the males and 5·1 per cent. of the females gave a positive reaction, and the conclusion come to was that in a typical working-class population of London at least eight to twelve per cent. of the adult males have acquired syphilis, and at least three to seven per cent. of the adult females.

The Royal Commission on V.D. reports that they are led to the conclusion " that the number of persons who have been infected with syphilis, acquired or congenital, cannot fall below ten per cent. of the whole population in the large cities, and the percentage affected with gonorrhœa must greatly exceed that proportion." [2]

" Congenital syphilis is a more serious infection than the acquired form, since it attacks tissues still in process of development, and is the cause of many deaths during infancy." [3]

To illustrate the effect of congenital syphilis on infantile mortality, alone or when complicating infantile disease the statistics [4] given by Dr. Helen Campbell

[1] Royal Commission on V.D. Final Report, p. 16, pars. 45–46. Appendix XII., pp. 139–140.

[2] Final Report, p. 23, par. 68. [3] Final Report, p. 29, par. 90.

[4] Of the 2172 infants under observation, 148 (6·81 per cent.) died. Of the 2172 infants, 1606 were registered during 1918; of these 1441 were legitimate and 165 were illegitimate. Of the 1441 legitimate

in her Report [1] for 1918, as Chief Medical Officer to the Infants' Department of the city of Bradford is most illuminative.

Primary syphilis is quite curable if treated soon after infection, especially since salvarsan, followed by mercury, has been adopted, but congenital syphilis is rarely cured if treatment is begun after birth, and Mr. Charles Gibbs states [2] that in his experience a positive Wassermann reaction in a congenital syphilitic child not treated till after birth never becomes negative. This is not surprising when it is remembered that the infection has been usually present in the child from the beginning of gestation, and that if the mother be herself infected the child may have received continuous infection throughout the pregnancy.

Cases are on record of congenital syphilis being carried to the third generation,[3] and it is probable that the unrecognised presence of congenital syphilitic infection explains many complications of ordinary disease,[4]

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107 (7·43 per cent.) died, while of the 165 illegitimate 41 (24·85 per cent.) died.

Of the 148 deaths, 120 (81·08 per cent.) were those of syphilitic infants and only 28 (18·92 per cent.) non-syphilitic.

Of the 107 legitimate infants among these 148 deaths in 1918, 83 (77·57 per cent.) had congenital syphilis, whilst 37 (90·25 per cent.) out of the 41 illegitimate deaths had syphilis.

Dr. Helen Campbell shows that these startling figures are in a considerable degree due to the fact that congenitally syphilitic infants are peculiarly selected for attack by respiratory, gastro-intestinal and specific (measles, etc.) infections, which kill them in much larger numbers than infants not so affected.

The percentage of deaths to the total (2172) infants under observation in 1918 was 15·72 in the 763 syphilitic infants and 1·99 in the 1409 non-syphilitic cases.

Many of the deaths (39·86 per cent.) were due to the above-named diseases in syphilitic children.

[1] Report of Dr. Helen Campbell on Infants' Department at Bradford, pp. 13, 50, 59–67, 72–74, 82.

[2] Personal communication.

[3] Appendix to First Report of Royal Commission on V.D., Q.Q. 6423–6426, 11,524. (Ernest Lane, Sir Jonathan Hutchinson and Sir Victor Horsley.)

[4] See also First Report of Royal Commission on V.D. Appendix Q.Q. 1380 and 8329.

especially in infants, and in affections of the nervous system in adolescence and early adult life.

Lady Barrett and Dr. Frances Ivens say fifty per cent. of still-births are due to syphilis. The latter knew a woman who had six consecutive still-births due to syphilis.[1]

The proof of syphilis in still-births depends upon evidence of the disease in the internal organs and the discovery of the mature spirochæte, which is found in from eighty to ninety-five per cent. of macerated fœtuses (*i. e.* those which have been dead some time before delivery).[2]

Syphilis does not usually render a man or a woman sterile, but infective syphilis in a man will cause his wife to have abortions and still-births, or to bring into the world children who either die early, or become degenerates. Owing to the desire to avoid hurting the feelings of parents, death certificates of infants dying from congenital syphilis may be so obscured that the primary cause of death does not appear. As a result national statistics on the prevalence of syphilis are unreliable.[3]

Nature's Control over Ante-Natal Infection

A woman infected by her husband with syphilis may readily conceive, and may continuously infect her child during pregnancy. Indeed, it is remarkable that any child born of untreated syphilitic parents should survive the pregnancy.[4] Dr. Routh has suggested that Nature

[1] Royal Commission on V.D. Appendix to First Report, Q. 11,650, and Final Report, Q.Q. 13,038–13,040.

[2] *Ibid.*, Q.Q. 9353–9360.

[3] See p. cxxxi, VI. and footnote references 1–2 on that page.

[4] Dr. J. E. R. McDonagh says, "The later manifestations of Syphilis in women are very much milder than in men; in women who are bearing children the symptoms are even milder still. From these facts one is tempted to conclude that the serum of women contains more natural protective substances than the serum of men, and that those protective substances are still further increased during pregnancy." (Biology of V. D., 1915, pp. 275–278.)

protects the child *in utero* not only from "accidents" by the security of its domicile, but also from maternal infection by the distribution of ferments derived from the cells of the fœtal chorion, at the junction of the maternal and fœtal portions of the placenta.[1]

These chorionic ferments or their derivatives appear to have a powerful action as a chemical filter, so that germs like tubercle bacilli, and even large organisms like the mature *Spirochæta pallida* of syphilis may be either destroyed or broken up into granules. These granules, as Professor H. Noguchi,[2] of the Rockefeller Institute for Medical Research, New York, has shown, in the case of spirochætes, may remain biologically inactive for long periods, and as he has further shown, in a continuous series of cultures from 1910 to 1917, may develop later on into mature spirochætes, which retain their infectivity. The chorionic ferments seem able to control the activity of those granules during pregnancy, but after labour, when the ferments have ceased to exist, the granules may develop into the mature organism, and both mother and child may show clinical evidence of syphilis. These views explain much that was obscure, and how it is that treatment of the mother by salvarsan or its substitutes, even after the third month of gestation, can in some cases enable a syphilitic mother to bear her first healthy child, though it is premature to express a definite opinion of the permanent result of this ante-natal treatment.

GONORRHŒA

Gonorrhœa is very rarely the cause of ante-natal disease or death, for if acute it will prevent conception, and if chronic it is one of the main causes of sterility by permanent inflammatory blocking of both the genital ducts

[1] *Lancet*, Jan. 12, 1918, pp. 45–49.
[2] *American Journal of Syphilis*, April 1917, pp. 319–323.

in one or both of the potential parents. Gonorrhœa, if present in an active form, especially if acquired late in pregnancy, may cause serious complications after birth to both mother and child, and the Registrar-General states that twenty-four per cent. of the children born in England and Wales who become blind after birth owe their blindness to this cause.[1]

About seventy per cent. of cases of Ophthalmia Neonatorum are due to maternal gonorrhœa.[2]

The Treatment of Venereal Disease

This Commission is primarily concerned with the birth-rate, and from that point of view with the need for the birth of healthy children, who will survive their infancy and youth, and will in turn produce healthy offspring. Our immediate concern in this part of our subject is to consider how to prevent the infection of the children during their mother's pregnancy. So far, at all events, as the child is concerned, the treatment is necessarily preventive.

The *treatment* of ante-natal syphilis as regards the child can only be carried out through the mother, and this can only be done if the expectant mother comes under medical supervision, which becomes, therefore, the chief primary indication. If the history tells of previous syphilitic offspring, or if there is clinical evidence of syphilis in the mother or father, prompt treatment of the mother in the early months of pregnancy may ensure the birth of a healthy child; but subsequent treatment of both parents and the child is essential in the public interest.

Apart from pregnancy, if either parent is known to

[1] See also Appendix of Final Report of Royal Commission on V.D. Subject index under "Ophthalmia Neonatorum," pp. 411–412.

[2] Royal Commission on V.D. Final Report, p. 12, par. 29, and Q. 19,459.

be syphilitic by clinical evidence or by a history of previous syphilitic children, conception should be avoided till *both* parents have been treated and pronounced free from infection.

To facilitate the treatment of adults the Ministry of Health in England and Wales is prepared to make a grant in aid of seventy-five per cent. of the approved expenditure to local authorities who are opening and conducting centres or clinics where diagnosis and treatment of venereal disease may be secured free of cost and confidentially, or where, if it can be arranged,[1] persons who have exposed themselves to possible infection can have prompt ("B") medical advice (see below). Appropriate chemical disinfectants can then be applied by the attending doctor or trained attendant to destroy the infecting organisms if they are superficially present.

No real difference of opinion exists as regards the value of adequate early treatment after infection, which is really in one sense prophylactic, as the infection has not declared itself. This is here dealt with as the "B" method. There are, however, two distinct methods of prophylaxis. These methods are separated only by a few hours in point of time, but there is an important moral question which separates them and has to be considered. Both these methods are intended to prevent infection after a potential exposure, both are, therefore, prophylactic in motive.

A. In one method the man is given a so-called prophylactic "packet" before leaving ship or camp, and is taught how to use it if he indulges in illicit intercourse, and he is also advised to use it before, as well as immediately after the act.

B. In the other method the civilian is advised to go to the nearest venereal clinic or doctor, and the sailor

[1] See footnote, p. cxv.

or soldier to his medical officer, as soon after exposure to infection as circumstances permit.

Both A and B will often prevent infection from becoming established in recent cases of exposure to syphilis and gonorrhœa.

It is strongly advised by those who advocate the A method for soldiers and sailors, that all those who have adopted it should as soon as practicable see a doctor, as advised in B, in case inexperience has led to inefficient use of the A methods; and further, advocates of both A and B strongly advise that those who have exposed themselves to infection should not assume that they are protected by A or B, or both, but should report themselves to their doctor again in a month or six weeks' time.

Obviously if the A method of disinfection were efficiently employed immediately after exposure to infection, it would be a more successful form of prophylaxis than when applied as B some hours afterwards, so that, if it were not for the moral question involved, every one would advise that A, followed by B, should be generally adopted in every case of potential exposure.

The *moral* point at issue may be stated as follows: How far is it right to give an antiseptic packet to a man who is going, casually or deliberately, to indulge in illicit sexual intercourse? Is it a moral attitude for the State to arrange that an individual man or woman should be able to get such "packets," and to make himself or herself theoretically secure against infection?

Is not such an equipment calculated to lessen the moral resistance of the young, to lower their moral tone, and make them more liable to take the first plunge into sexual vice? If they are able, with the help of the packet, to escape infection at the first adventure, would it not inevitably encourage them to take further risks with less hesitation and with diminished moral resist-

ance? Would it not tend to encourage prostitution by lessening its dangers?

These questions must receive an affirmative answer. The objection to the provision of packets is not merely that the motive of fear as a deterrent from vice is thereby weakened, assuredly not the highest motive, and yet one that cannot without injury to society be ignored in this as well as other forms of wrongdoing. The practice is to be condemned as a deliberate abandonment of the moral ideal to be strenuously maintained in regard to the relation of the sexes. For it is likely to be taken as an intimation that immorality, with consequent prostitution, is a natural necessity which must be accepted, that safety from disease is of more importance to society than abstinence from sin, that the wrong done to the woman by the man may be glossed over, so long as he does not catch or pass on the disease. To discuss the question as if what is of primary importance is the preservation of the health of self and others, and not protection of moral interests, is to lower the whole moral tone of the community.

It is admitted also that the use of the A method, even in the hands of disciplined men, as in the Army and Navy, is not infallible, and would be more likely to fail when used by civilians, who would almost certainly get infected if they continued to run risks. Inasmuch however, as civilians would be apt to look upon themselves as saved from infection by these applications, they might inadvertently infect others afterwards, before they realised their own infection, and the spread of venereal disease, instead of being lessened, would be increased.

The National Birth-rate Commission have also considered the note (Cmd. 322) by the Chairman of the Interdepartmental Committee to the Minister of Health. It is there stated [1] that the local application of certain

[1] Conclusions, pp. 11 and 12. Nos. 2, 3, 5.

disinfectants at centres within a short time after intercourse has been more efficacious in preventing venereal disease among soldiers and sailors than the application of the same remedies by the individual himself. The National Birth-rate Commission is of opinion that the establishment of early treatment centres in urban districts is desirable.[1] The Commission, however, do not think that such provision will solve the problem of the prevention of venereal disease, and other preventive measures will probably also be necessary.

The National Birth-rate Commission desire to record their opinion that, in view of the gravity of the venereal disease problem, the Ministry of Health would be justified in calling the attention of the public to the fact that abstinence from promiscuous sexual intercourse is the only thoroughly effective method of preventing the spread of disease, and that it is the urgent duty of every citizen who indulges in promiscuous sexual intercourse in disregard of the claims of sex morality and citizenship, and thereby exposes himself or herself to the risk of infection, to use some method of disinfection, either personal, immediately after intercourse, or by private medical treatment, or by attendance at an early treatment centre at the earliest opportunity.

Should the Minister of Health see fit to do this, then the question arises how this immediate disinfection could be best brought about.

The National Birth-rate Commission, whatever may be their view as to the use of packets in the Army and Navy, agree with the general conclusion (p. 12) of the

[1] In view of the general reluctance or refusal of those who are controlling venereal clinics to arrange for clinics by day and night for early treatment after exposure, there will be difficulty in getting the B proposals generally adopted for civilians. It is easy to ensure the carrying out of B for sailors or soldiers on their return to their ship or barracks after a night's leave, but to arrange for immediate treatment all over the country for such purposes in the case of civilians is obviously impossible.

Inter-departmental Committee in their Report to the Minister of Health that "the official application of a packet system to the civil community is neither desirable nor practicable." They recognise, however, that no difficulty of an official kind should be placed in the way of obtaining disinfectants by individuals for use after exposure.

Further, if on later investigation the method of *self-disinfection* should prove to be more effectual in preventing the spread of venereal disease than the method of *disinfection at early treatment centres*, then the National Birth-rate Commission thinks that any difficulties of an administrative [1] kind which may now prevent registered chemists from selling such disinfectants should be removed, provided such preparations are only to be sold when accompanied by a notice that they are to be used for disinfection only, and are useless for treatment.

It is probable that if all available means of prevention and cure at the disposal of the world's population were everywhere adopted, as the result of universal education and spread of knowledge of the subject, and consequent rousing of the world's conscience, these diseases could be stamped out in a generation. To effect this, however, the question must be attacked at all points, the moral no less than the hygienic, and every possible avenue for the conveyance of infection must be completely blocked. Barriers at certain points only are inadequate. Sexually acquired diseases cannot be eliminated only by trying to make illicit sexual congress safe, or by promising a certain cure if infection result. Such efforts standing alone would merely encourage the more frequent exposure to sexual infection, would lower the individual's

[1] The Venereal Diseases Act, 1917, which renders illegal the treatment or prevention, or any advertisement of the treatment or prevention of venereal diseases, may actually prevent civilians and others who have become acquainted with the chemical disinfectants recommended, from obtaining them, even at a registered chemists, without a medical prescription. This was probably not contemplated when the Act was passed.

moral resistance, and would almost certainly lead to more infection rather than to less.

Amongst the numerous avenues which must be blocked, and problems which must be solved, apart from prophylaxis and treatment, the following are some of the most obvious, which require to be considered by some such authority as the recent Royal Commission on Venereal Disease, and not merely from the birth-rate point of view of our Commission.

OTHER SOCIAL PROBLEMS AWAITING SOLUTION

I. Notification of venereal disease (pp. cxvii–cxxiv).

II. Compulsory treatment of venereal disease, continued till certified to be cured (pp. cxviii–cxxiv).

III. Sexual relations of diseased persons (pp. cxxiv–cxxvii).

A. *In Married Persons*

(*a*) How to prevent projected marriages, where transmissible disease is present in one or both of the persons. This involves legislation and the questions of medical certificates of health before marriage and of professional confidence (pp. cxxiv–cxxvii).

(*b*) The question of a decree of separation or nullity being granted where one of the partners has been infected by the other, (1) when the disease was acquired previous to marriage, or (2) after marriage; (3) the question of equal treatment of husband and wife in regard to venereal infection (p. cxxvii).

B. *In Unmarried Persons*

The infection of another individual by sexual intercourse apart from the married state (p. cxxvii).

IV. The problem of prostitution in its relation to venereal disease (pp. cxxvii–cxxx).

V. The problem of alcohol (and its control) in relation to venereal disease (pp. cxxx–cxxxii).

VI. The confidential character of medical death certificates as regards persons dying from diseases due primarily to venereal infection (pp. cxxxi–cxxxiii).

I AND II.—COMPULSORY NOTIFICATION AND TREATMENT

An enormous amount of evidence on this subject was given before the Royal Commission on Venereal Disease,[1] practically every witness wishing that compulsory notification and treatment could be adopted, but the most believing this policy to be at that time impracticable, because of the probability of popular opposition owing to lack of knowledge of the subject, and ineffectual, because of the difficulty of enforcing treatment until those notified were cured, and because compulsory notification, even when anonymous and impersonal, would be likely to deter infected persons from consulting a doctor.

The Royal Commission on Venereal Disease in 1916[2] came to the conclusion "that at the present time any system of compulsory personal notification would fail to secure the advantages claimed," and "were of opinion that better results might be obtained by a policy of education regarding the importance and serious nature of venereal disease, and by adoption of measures for increasing largely the facilities for diagnosis and treatment" (par. 167).

They also discussed the question of "anonymous notification for purely statistical purposes, to be followed by no administrative action," but did not consider that the evidence was in favour of such a course (par. 169). The Commission, however, advised that "statistics

[1] Subject Index (Notification, Compulsory) to Appendix of Final Report, pp. 409–411.

[2] Conclusions on pp. 48–50 of the Final Report (pars. 156–170).

should be kept of the numbers of patients for whom salvarsan is provided at the public expense, and that all institutions receiving grants from the Exchequer should keep accurate aggregate statistics of their cases of venereal disease" (par. 170).

Compulsory notification and treatment are intimately associated. One without the other seems useless. Experience has shown that in combination in the U.S.A., and in our colonies, especially in Western Australia, both can be carried out, *up to a certain point as regards treatment*, without such popular resistance as might have been expected. California made venereal disease notifiable in 1909, and forty out of the forty-eight United States of America have now adopted notification of venereal disease in varying degrees of completeness.

Principles of Compulsory Notification

Syphilis and gonorrhœa are communicable infectious diseases, and their spread should be arrested. *Socially*, these diseases are contagious, communicable from one person to another by the infecting organisms. By means of these organisms any individual can infect another individual, sexually or otherwise, through any abrasion or delicate tissue, especially if minute glands are present, as in most mucous surfaces. They should for this reason come into line, if possible, with other notifiable disorders.[1]

[1] *List of Notifiable Diseases in England and Wales, September* 1919.

Small-pox.
Cholera.
Diphtheria (including Membranous Croup).
Erysipelas.
Scarlet Fever.
Typhus Fever.
Enteric Fever.
Paratyphoid Fever.
Relapsing Fever.
Continued Fever.
Puerperal Fever.
Plague.
Cerebro-spinal Fever.
Tuberculosis, Pulmonary.
Tuberculosis, Non-Pulmonary.
Measles.
German Measles.
Ophthalmia Neonatorum.
Encephalitis Lethargica.
Malaria.
Dysentery.
Trench Fever.
Acute Primary Pneumonia.
Acute Influenzal Pneumonia.
Glanders and Farcy.
Polio-Encephalitis.
Polio-Myelitis.
Anthrax.

Notification of Venereal Disease should be made to the Public Health Authorities, and by the doctor in attendance, by case number only, the physician alone being cognisant of the patient's identity. The patient is allowed to change his physician for good reason, but must otherwise continue treatment till the physician can certify that he is cured. If the patient ceases attendance, the physician has to notify the fact anonymously to the Medical Officer of Health, and the second physician to whom the patient goes must do the same.

If the patient ceases attendance and does not go to another physician, the M.O.H. should obtain the patient's name from the physician, in order that proceedings may be taken to ensure treatment being continued, and to prevent his spreading infection. Such conduct on the part of the patient can alone reveal his identity, and then only to the one confidential official of the Health Authority.

All these conditions are carried out in Western Australia, where they were first instituted in 1915, and in a somewhat less drastic manner in Victoria and Queensland, and in forty out of the forty-eight United States of America, where notification has been established. Since 1918 notification has been adopted in various degrees in Canada, in the Provinces of Saskatchewan, Ontario, Nova Scotia, New Brunswick, and in 1919 in British Columbia.

According to Miss Norah March and Dr. Douglas White, experience has shown that this anonymous notification does not drive patients to quacks, but that, on the contrary, chemists and others who previously treated such cases now send them to physicians.

The statistics on p. cxxi show that compulsory notification is becoming established, and is ensuring effective treatment, that comparatively few patients cease treatment before being cured, and that about fifty

per cent. of these fugitives (Massachusetts and Victoria) are forced, or encouraged, to return for further treatment.

The doctor's fees should be paid by the State in suitable cases, and he should also receive payment for the notification certificate.

Locality.	Total Population.	Total Notification.	Proportion of Notification to Population.	Reported for Discontinuing Treatment	Reclaimed for Treatment.
Massachusetts [1]	3,400,000	G. . 8,950 S. . 3,922 Total . 12,872 Syphilis 30·4 % of cases notified	1 in 264 (15 months)	1579 12·2 % of notified cases	708 Percentage reclaimed 44·8
Texas [1]	4,000,000	G. . 1,3412 S. . 9,444 Chanoroid 1,621 Total . 24,477 Syphilis 38·5 %	1 in 160 (5 months)		
Western Australia [2]	305,000	Male . 1,065 Female . 251 Total . 1,316 Syphilis 20 %	1 in 230 (in year 1917)		
Victoria [2]	1,375,000	Male . 6,285 Female 1,350 Total . 7,635 Syphilis 25 %	1 in 180 June 1917 to June 1918	1500 19·6 % of notified cases	887 Percentage reclaimed 59·1
Queensland [2]	605,813	G. . 1,148 S. . 329 Total . 1,447 Syphilis 22·7 %	1 in 410 (in year 1917)		

[1] Figures procured by Miss Norah March, B.Sc., given in evidence before the Birth-rate Commission, pp. 343–356.

[2] Figures taken from "A Conspectus of Recent Legislation on Venereal Disease in the British Dominions and United States of America," by Douglas White, M.D. London. Published by the National Council for Combating Venereal Disease.

The real difficulty in making notification successful is not in getting numerous persons to go voluntarily to a doctor, and be adequately treated till cured, because they know that this can be done anonymously and without publicity, as is shown by reports from Australia and U.S.A. The difficulties are three : (1) In preventing the gap in the fence allowing the escape of a percentage of cases (twelve to nineteen per cent.) (see Table) who cease attendance before being certified as cured, and who are liable to infect others. Some of these wanderers can be traced and reclaimed (see Table), forty-four and fifty-nine per cent. in two places. (2) It is also agreed (Dr. Douglas White) that where compulsory notification is general there are a certain number of infected persons who conceal their condition by avoiding notification and treatment. Efforts have been made in some places to get these into the scheme. (3) The further step has been taken of compulsory examination of persons reasonably suspected of being carriers of disease,[1] followed by compulsory treatment and, where necessary, detention. This must be regarded as a logical sequence to notification. Nothing but this rational sequence to compulsory

[1] As in Regulation No. 40*d* in the Defence of the Realm Act, 1917, of this country (now discontinued)—

REGULATION No. 40*d*, DEFENCE OF THE REALM ACT

No woman who is suffering from venereal disease in a communicable form shall have sexual intercourse with any member of His Majesty's Forces, or solicit or invite any member of His Majesty's Forces to have sexual intercourse with her.

If any woman acts in contravention of this Regulation she shall be guilty of a summary offence against these Regulations.

A woman charged with this offence under this Regulation shall, if she so requires, be remanded for a period (not less than a week) for the purpose of such medical examination as may be requisite for ascertaining whether she is suffering from such a disease as aforesaid.

The defendant shall be informed of her right to be remanded as aforesaid, and that she may be examined by her own doctor or by the Medical Officer of the prison.

In this Regulation the expression " venereal disease " means syphilis, gonorrhœa, or soft chanore.

notification could make the scheme complete, and it is one of the difficult problems to solve. There is no power in this country to force civilians into institutions to remain there till cured, and putting aside the impossibility now of affording institutional space for such cases, it is difficult to see how compulsory treatment could be enforced, without bringing again into operation the evils of the Contagious Diseases Act.

Though they considered compulsory treatment theoretically desirable, the Royal Commission on Venereal Disease did not advocate it, "as it involved compulsory detention and would work unequally, and chiefly upon those who had brought themselves under restraint," [1] and the Royal Commissioners agreed with Mr. Ernest Lane that "compulsory detention for treatment had been proved inefficient, due perhaps to inadequate methods."

Notification with constant gaps, permitting infecting persons to escape, would fail to stop the local spread of venereal disease, and even if compulsory treatment were scientifically enforced as regards every infected individual in a given area, the disease would soon re-enter that area if surrounding national areas were not successfully adopting similarly drastic measures.

The Birth-rate Commission realise these and other difficulties involved in the introduction of any efficient scheme of compulsory notification and treatment of venereal diseases, but they feel that it has now passed the experimental stage, both in our Colonies, and in forty out of the forty-eight of the United States of America, and that it is advisable for the State to make a trial of compulsory notification and treatment in this country, provided that there should be no return to the principle or practice of the Contagious Diseases Act.

[1] First Report, Q. 3182 (Ernest Lane), and Final Report, par. 173.

The Royal Commission on V.D.[1] evidently foresaw such a possibility when it finally declared, " It is possible that the situation may be modified when these facilities (for diagnosis and treatment) have been in operation for some time, and the question of notification should be then further considered. It is also possible that when the general public become aware of the grave dangers arising from venereal disease, notification in some form will be demanded." This is largely the case now.

III.—Problem of the Sexual Relations of Venereally Diseased Persons

A. *As regards those who are married, or are contemplating marriage.*

If persons contemplating marriage had to obtain *health certificates* procured from doctors who had either been in attendance on the two persons, or were instructed to examine them so as to enable confidential certificates to be given to some third person, appointed or approved by the State or municipality, public health would benefit materially.

If the certificates justified such a course, the local health authorities would have power, subject to appeal, to prohibit or postpone the marriage. If, however, the legislative area where this law operated were too circumscribed, and the interested persons could cross the boundary into the next State (*e. g.* as in U.S.A.), where there was no such legislation, no permanent good would ensue.

Sex education has already done much to produce voluntarily some such effect, and it is quite a usual thing for persons before marrying to consult their doctors as to the wisdom of such a step from the hygienic point of view, especially in suspected tuberculosis, or

[1] Final Report, 1916, p. 50, par. 168.

where mental disease is in the family, or where a person has been previously infected by one or other form of venereal disease.

The question of professional confidence as between doctor and patient needs to be considered under existing circumstances, as well as under such altered legislative conditions.

If a doctor has been treating a patient for venereal disease who is not yet cured, but is contemplating marriage, " it is his duty to warn the patient of the probability or possibility of infecting his or her partner." [1] Such warning would be usually sufficient.

The Royal Commission (par. 203) further states, " We are informed, however, that a question of much difficulty arises where a medical practitioner is aware that the advice he gives to his patient is not likely to be followed, and that the marriage will in all probability proceed. . . ."

In such circumstances can a doctor justifiably, or without a breach of professional confidence, warn the intending partner, or his or her parents, of his patient's ill-health? The Royal Commission say that " to assert to a third person (par. 204) that any one is suffering from a venereal disease is, if in writing a libel, if by word of mouth a slander," but " in a civil action, proof of the truth of the defamatory words affords a complete defence, and in criminal proceedings if the jury found that the defamatory words were true in substance and in fact, and that it was for the public benefit that the matters charged should be published, the defendant would be entitled, under Lord Campbell's Act, to judgment in his favour " (par. 204).

The Royal Commission, however, continues, " Any award of costs would usually be a very inadequate compensation for the loss of time, and for the trouble caused even by a successful defence."

[1] Royal Commission on V.D. Final Report, pp. 56–57, pars. 202–205.

The Report continues, "As the law now stands, the fact that the communication or warning has been made or given in good faith, with the sole object of saving the intending wife or husband from the dangers which might arise from the proposed union, would not afford the medical practitioner even the qualified protection which is in some circumstances conferred on a defendant by the doctrine of privileged communication" (par. 204).

The Royal Commission "think that a change in the law in this respect is much needed," and that such "communication made *bona fide* should be deemed to be a privileged communication" (par. 205).

As regards health certificates for marriage, the Royal Commission on V.D. considered "that it would not be possible at present to organise a satisfactory method of certification of fitness for marriage."

The National Birth-rate Commission think that this question should be now re-considered with a view to legislation. If a certificate of health were to become a legal obligation for persons contemplating marriage, many of the legal, ethical and professional difficulties surrounding this question would be removed.

Amendments in Matrimonial Laws with Respect to Venereal Infection

The question arises whether separation or nullity of marriage should be granted,[1] where one partner has been infected by the other when the disease was acquired by illicit sexual intercourse (1) before—and (2) after marriage.

These points need to be authoritatively decided as regards whether both or only the latter of these modes

[1] Royal Commission on V.D. Final Report, pp. 57–58, pars. 206–211, and Appendix to Final Report, Q. 21,095, etc. (Sir Samuel Evans).

of conveying infection to a partner should be sufficient to procure nullity for both sexes, without having to prove desertion or an act of adultery after marriage. The question of making the matrimonial laws in respect of venereal infection applicable equally to both sexes should also be settled.

B. *As regards unmarried persons*

Venereal Infection.—The question arises as to the best way of dealing with cases of infection of individuals by sexual intercourse (apart from the married state), where the presence of infection and the cognisance of its presence have been proved as regards the infecting person.

If this could be dealt with by equal legal procedure and treatment in both sexes, without the inexpedient and one-sided methods of the C.D. Acts, so wisely discontinued in this country, another avenue for the introduction of venereal disease would be blocked.

The Royal Commission on V.D., however, did not advise legislation with a view to prevent or diminish the communication of disease between unmarried persons, but hoped "that the effect of treatment centres and increased knowledge of the evil and of its remedy would at length reach this class." [1]

IV. The Problem of Prostitution in its Relation to Venereal Disease

Professional prostitution is one of the most frequent avenues of venereal infection to the community. Prostitution is particularly harmful because one woman, herself infective, may convey the disease to many men in a single day, and these men in their turn may become infecting agents, perhaps in their own families. Further than this, if a woman, herself having acquired immunity

[1] Final Report, p. 58, par. 212.

from infection, associates sexually with an infected man, she may, without being infected herself, become a carrier, and convey either form of venereal disease to other men.

To attack prostitution with any chance of success, all those who profit financially by it must be dealt with, such as landlords, brothel-keepers and agents of all types; liquor traffic must be controlled; there should be no excuse for prostitution because of low wages or lack of occupation; and institutional treatment of persons infected with venereal disease should be provided till they cease to be infective.

Prostitution, apart from it being an important avenue for spreading venereal disease, must also be regarded as striking at the root of family life, and since family life is the basis of any community, the repression of prostitution becomes still more important. Prostitution is socially immoral also in the various ways in which it acts, in lowering the comradeship and the mental and spiritual union of husband and wife, for without difficulty, publicity or heavy expense, it supplies the means for satisfying the sexual instinct of the husband apart from the usual natural sequelæ of the birth and rearing of children, or, as an alternative, apart from the continuous use of contraceptives, which often become intolerable to husband or wife or both. In numerous cases dislike of one or other of these alternatives may lead to illicit intercourse or to the use of prostitution.

The medical and social advantages of suppression of prostitution are, therefore, obvious, yet it is evident that any means of preventing venereal disease other than by continence may prove to encourage prostitution by ridding it of some of its dangers, and to lessen to that extent the fear of consequence in those who may thus the more readily expose themselves to potential infection.

The trade of prostitution cannot be universally eradicated till the conscience of the whole civilised world

determines that it shall cease, not only in countries like ours, where spasmodic and local attempts to suppress solicitation and brothels are made, but in other countries where streets of brothels, or houses with "red lights," legally exist, and where compulsory examination and treatment of licensed prostitutes are enforced.

During the Great War it was realised that professional prostitution was becoming not the only, and perhaps not the chief cause of disease, but that young girls in their teens had in partial ignorance of their risk, yielded themselves to soldiers and sailors, and had become themselves infected, and might again in ignorance re-infect others.[1]

It is possible that the suppression of professional prostitution would encourage the formation of a class of amateur prostitutes, unless education could establish the virtue and value of sexual continence and fuller knowledge of the laws of sex hygiene should permeate all society.

In order to minimise temptation to irregular unions, earlier marriage between healthy and suitable persons is essential. State assistance to start young couples on

[1] Lieut.-Colonel L. W. Harrison says—

"Some idea of the extent to which women, who are not prostitutes in the ordinary sense of the word, are becoming infected with venereal diseases, may be gathered from the statistics collected in some of the large military venereal hospitals. They show that by far the greater amount of venereal infection at the present moment is being conveyed by young women who receive no money, but indulge in the pleasure solely as a distraction, or perhaps to show to the soldiers concerned some appreciation of the sacrifices they are making for the country. For instance, Captain Gibson's figures show that 708 out of 981 cases of gonorrhœa were infected by these amateurs, and 1281 out of 2238 of syphilis; altogether 1989 amateur infections out of 3219. Captain Craik found that out of 325 cases of syphilis 274 were the result of amateurs, and one inquiry at my own hospital discovered 324 amateur infections out of 460." "These women will be responsible for the huge increase in venereal diseases in this country when the army is demobilised," he continues, "and nothing efficient is being done to sterilise them. . . . The burden will fall on the civil community" (Journal of Sanitary Institute, September 1919, p. 100).

the land in this country or after emigration, together with State help during pregnancy and the puerperium, would be of great use in carefully selected cases.

V. Alcohol in its Relation to Venereal Disease

"There is an intimate relation between alcohol and venereal disease." [1] Alcohol lessens resistance to temptation; interferes with disinfection; lessens resistance to infection; aggravates the symptoms; and complicates the treatment.

The first exposure to infection, whether in a youth or a girl, often occurs under the influence of alcohol. Fleet-Surgeon W. E. Home,[2] states that one-third of the total admissions both to the Army and Navy sick list in 1906 were venereal, and that it is generally believed that at least two-thirds of the venereal cases in the Army and Navy were contracted when the patient was under the influence of drink.

In the absence of any exact statistics on the question, it is impossible to estimate the extent to which alcoholic excess promotes the spread of venereal disease; there are sufficient *a priori* grounds in the known action of the drug on mental functions to warrant the Commission in expressing the view that effective measures in restraint of alcoholism will in some degree tend also to decrease sexual immorality and disease. On this account, as well as for the statement of other injurious influences exerted by alcoholism on infant mortality, to which reference is made elsewhere in this Report (p. cxxxvi), the Commission are of opinion that the system of liquor control established in this country during the war should be maintained at least in its essential features.

[1] Royal Commission on V.D. Final Report, p. 31, par. 99.
[2] *British Medical Journal*, August 2, 1919, p. 154.

VI. Confidential Death Certificates

The Royal Commission on V.D.[1] says that "the returns annually presented by the Registrar-General are of little value as indications of the prevalence of venereal disease," and Dr. Stevenson, Superintendent of Statistics to the Registrar-General says, "The worthlessness of the returns as an absolute statement of the number of deaths from venereal disease scarcely requires demonstration."[2]

The British Empire and the United States of America are the only nations which have an open death certificate accessible to the public. All the European States have a confidential death certificate, and in Switzerland no copy of the certificate may include the cause of death.[3]

The advisability of death certificates being made confidential so as to enable the whole truth to be stated was discussed by Dr. T. H. C. Stevenson and many present and past members of the Birth-rate Commission in their evidence given before the Royal Commission on V.D.[4]

The Royal Commission on V.D. says, "Not only are deaths recognised as due to this cause (syphilis) not so certified from the fear of hurting the susceptibilities of relatives, but large numbers of deaths are ascribed to other diseases now known, or beginning to be known, as caused by venereal disease. For example, among other diseases locomotor ataxy and general paralysis are not known to the public as exclusively syphilitic in origin, and are therefore certified without reluctance. The same may be said of aneurism of the aorta, which is mainly attributable to the same cause. Venereal disease

[1] Final Report, p. 20, par. 58.
[2] Appendix I. Final Report, p. 71.
[3] *Ibid.*, p. 77.
[4] Appendix to First Report, especially Dr. T. H. C. Stevenson's evidence and Q.Q. 1–286 and Q.Q.3231–3421; and Subject Index of Final Report, pp. 376–377, under "Death Certificates"; and Defects of Registration, Final Report, pars. 10, 11, 58–63.

to a considerable extent is hidden in other items of the official classification, and infant deaths returned under congenital debility and other headings, are largely due to syphilis."[1] Similarly if a person dies from certain diseases of the liver or kidney due to chronic alcoholism, the doctor would usually omit to fill in the primary cause of death for fear of annoying the relatives.

In all such cases the Registrar-General is authorised to write to the doctor to require further information, which he is usually able and willing to give confidentially. Such inquiry would probably only be made in cases where the cause of death is insufficient or obviously evasive.

One of the difficulties of a confidential death certificate is the point of view of an insurance company which has granted a policy for insurance, and the insured individual has filled up his application form without stating that he has had syphilis.

The insurance company consider that any confidential death certificate should be open to their agent, and if it stated that the spinal or brain disease, or other late result of syphilis, was due to the primary infection, acquired perhaps years before the insurance was sought, the policy might be rendered void.

There is the further point whether there should be two death certificates. If so, the plan might be carried out in one of two ways: *First*, by the doctor handing to the relatives for registration a formal certificate, with the secondary or contributory cause of death only, and, if the doctor thinks it desirable, a second confidential one to be sent privately to the Registrar-General, to show the *primary* cause of death, if omitted from the open certificate. This plan would necessitate only an occasional second certificate.

Secondly, Dr. Stevenson's proposal of a constant

[1] Report, pp. 6, 7, par. 11.

use of two certificates, "one to be handed to the relatives of a deceased person stating only the fact of death, and to send to the Registrar a second confidential certificate stating the cause of death. Access to this confidential certificate would only be possible on the order of a Court of Justice." [1] In each plan, the second certificate would be placed ready for use between the counterfoil and the relatives' certificate.

The Royal Commission on V.D. (par. 62) stated that "we are deeply impressed by the facts that accurate knowledge of the prevalence of diseases is essential in the national interests, and that such knowledge in the case of venereal diseases especially is most defective. We therefore commend the proposals of the Registrar-General to the serious consideration of your Majesty's Government." [2]

No steps in this direction have been yet taken, and the National Birth-rate Commission urge that the Registrar-General's recommendations should be now duly considered by the Government as a valuable reconstruction procedure.

Conclusions arrived at by the National Birth-rate Commission

The encouragement given by the Royal Commission on V.D. to provide further facilities for the prevention, diagnosis and treatment of venereal disease, and the knowledge since gained by the community by sex education, and by instruction regarding the personal and national dangers of both syphilis and gonorrhœa, have led to great popular enlightenment, and to a remarkable interest in the subject. This is largely due to the action of the National Council for Combating Venereal Diseases.

There is now a strong demand for further steps to be taken both along the lines indicated by the Royal

[1] Royal Commission on V.D. Final Report, par. 60.
[2] See Defects of Registration, pars. 10, 11, and pars. 58–63.

Commission, as in Group I, and along other lines which were considered by the Commission, at the date of their Report (February 1916), to be premature or impracticable as in Group II, as well as regards problems of venereal disinfection, which have come to the front since the Royal Commission reported (Group III).

Group I. Notification of fœtal deaths before the twenty-eighth week of gestation (par. 63).[1]

Amendments to the matrimonial laws as regards the communication of venereal disease (pars. 206–209).[1]

Control of alcohol in its relation to venereal disease (par. 99).[1]

Confidential death certificates (par. 62).[1]

Free treatment of venereal disease at numerous centres, with grants in aid, (pars. 144, 148–150, 153-154).[1]

Statistics of clinics and institutions for treatment of venereal disease (par. 169).[1]

Protection of medical practitioners when endeavouring to prevent a marriage with an infected person (par. 205).[1]

Group II. Amongst the problems concerning which no definite suggestions were made by the Royal Commission, were the following :—

Compulsory notification and treatment of venereal disease (pars. 156–170).[1]

How to prevent the communication of venereal disease between unmarried persons (par. 212).[1]

Prostitution.

Certification of fitness for marriage (par. 201).[1]

[1] Royal Commission on Venereal Disease.

Group III. Problems not considered by the Royal Commission on V.D.
Self-disinfection before and after illicit intercourse, or both.

The National Birth-rate Commission consider that advance along all these lines would be facilitated by the appointment of another Royal Commission or Inter-departmental Committee: (1) to promote further the conclusions and commendations of the Royal Commission on V.D. (Group I); (2) to reconsider the debateable problems (Group II) left unsettled in the Report of the Commissioners in 1916; and (3) to take into consideration the new and vital problems (Group III) now being so actively discussed by all (whether professional or lay) who are working to eradicate venereal disease.

Each of the items in these three groups is now, by time and experience, more ready for deliberation, and perhaps for decision, than in 1916. If definite progress is to be made, it must be done by fresh legislation, and by State and municipal action, backed up by public support, sympathy and co-operation.

The influence of the exhortation to continence and purity in the lectures and propaganda of the National Council for Combating Venereal Diseases, on both the intelligence and conscience of the nation, has been great, and the time seems now opportune to organise and consolidate the medical and administrative methods needed to prevent the infection and check the ravages of the disease.

Public interest in, and knowledge of, the subject is now very different from what it was, and national acquiescence is almost sure to be forthcoming in any wise legislation which may be required, and which would enable the Ministry of Health to deal efficiently with

both the prevention and treatment of all forms of venereal disease.[1]

B. ALCOHOLISM IN RELATION TO THE BIRTH-RATE

The conclusions formulated by the Commission in this section of their Report have reference solely to the effects of alcoholic excess. The Commission have not considered the question of the influence of the moderate use of alcoholic beverages.

Broadly speaking, there are two ways in which parental alcoholism may influence the birth-rate and the vitality and development of offspring. The first may be described as the way of direct biological action, whether on the germ-cells of either parent prior to conception, or on the developing offspring during pregnancy when the mother is of alcoholic habits. The second way is through the deterioration of the environment, which is the ordinary result of parental intemperance.

Effect of Chronic Alcoholism on the Germ-cells

It has long been a common-place of clinical observation that conditions of faulty development, manifested more particularly in varying degrees of mental deficiency and in predisposition to certain forms of insanity, are frequently found to be associated with a history of parental alcoholism; and medical opinion has generally inclined to the view that in such cases alcoholic poisoning of the germ-cells is the cause of the arrest or perversion of development. This view has, however, occasionally been called in question by critics who assert that the habit of alcoholic excess is in itself a proof of the existence of a degenerate taint in the stock, and who argue that the observed condition of defect in the offspring

[1] For the reservations under which this Section of the Report has been signed by the members see the end of the Report.

of the drunkard represents merely an accentuated degree of that taint, and is not, therefore, to be taken as evidence of a detrimental action on the germ-cells. There is an element of truth in this criticism as regards some of the earlier clinical evidence purporting to show the deleterious influence of parental alcoholism; but it does not apply to the more careful and detailed records which have been collected in recent years, and in which due note has been taken of this possible source of fallacy.

Thus investigations from the Mendelian point of view into the family history of cases of insanity, have furnished a very large body of evidence in support of the view that parental alcoholism is an important factor in creating the predisposition to the specially degenerative forms of mental disease.[1] Further, it has been shown by Grassmann[2] and other observers that in the ancestry of the insane who belong to the degenerative type, alcoholism occupies a position in the family history which is quite different from that of the unequivocal manifestations of degeneracy: these latter manifestations are found not only in the parents of the insane, but also, and much more frequently, in the grandparents and in the collateral lines, whereas alcoholism, on the contrary, when it is met with, is chiefly observed in the father and mother, and hardly occurs, indeed, in other relatives with sufficient frequency to entitle it to any significance. Obviously such a contrast would not exist if parental alcoholism were, like parental insanity, merely the expression of the degenerative taint, and not an actual cause of its development in the stock.

So far, then, as purely clinical evidence is concerned,

[1] Stromayer. In 56 pedigrees comprising 1338 individuals (*Munch. Med. Wochenschrift*, 1901, has 95 and 96). Wittermann in 81 pedigrees comprising 2660 individuals (*Zeitchf. f.d. ges. Neurologie u. Psychiatrie*, vol. 20, 1913).

[2] Grassmann. *All. Zweitschrift f. Psychiatrie*, 1896.

it would appear to be established, as at least highly probable, that parental alcoholism may involve serious injury to the germ-cells, and consequently to the offspring and subsequent descendants of the drinker. This conclusion finds strong confirmation in the results obtained by breeding experiments with alcoholised animals. Thus Stockard,[1] who has done the most important work in this field, has found that guinea-pigs, subjected for usually one hour daily, over a considerable period of time, to the vapour of alcohol, produce offspring which, as compared with the offspring of untreated animals used as "controls," are conspicuously inferior in strength and vitality, and in many instances present gross abnormalities of development. These results are clearly attributable to a deleterious action on the germ plasm, for they were found when the male parent alone was alcoholised, and they were traceable in non-treated descendants through three generations. In a later research the same observer has furnished further evidence on this point by pairing normal males and females successively with normal and alcoholised mates: fifteen normal females mated with twenty-six normal males gave fifty-nine young, of which 13·55 per cent. were born dead or died within three months; mated with twenty-three alcoholised females, they gave fifty young, of which 40·0 per cent. were still-born or died within three months; in the normal matings there were no defective young, while by the alcoholic sires there were ten per cent. Fourteen normal males mated with thirty-six normal females gave eighty-six young, of which 23·41 per cent. were still-born or died soon after birth; mated with forty-four alcoholised females they gave a hundred young, of

[1] Stockard. *American Naturalist*, vol. 47, 1913. *Proc. Society of Exper. Biology and Medicine*, vol. 11, 1914. Stockard & Craig. *Arch. f. Entw'Mech.*, vol. 35, p. 569. Stockard & Papanicolaou. *American Naturalist*, vol. 50. Part I. pp. 65–88; Part II. pp. 144–177.

which 42·0 per cent. were born dead or died under three months; there were no defective young from the normal, but six per cent. from the alcoholic mothers.[1]

Two other workers, Cole and Davis,[2] have obtained evidence of similar import by a different method. Proceeding from the fact that in rabbits, when two males are mated with the same female, superfœtation (impregnation by different acts of coition of several ova at same stage of development) occurs, they selected pairs of females, one of which showed decidedly greater fertilising ability, so that it ordinarily sired the majority of the young in a given litter. The more vigorous male was then alcoholised by the inhalation method for some months, after which, when again mated in competition with the male of previously proved inferiority, it was found that the alcoholised animal failed to sire any young at all, though when mated singly with a female he was still able to beget offspring.

The results summarised in the preceding paragraphs appear to prove beyond doubt that in chronic poisoning by alcohol the germ-cells may be so damaged as to affect injuriously the vitality and power of development of the offspring of the alcoholised parent. This conclusion derives further support of an indirect kind from the fact that lesions of the genital glands are amongst the most frequent pathological findings in cases of chronic alcoholism in the human subject and in animals which have been experimentally alcoholised.[3]

[1] A member of this Commission visited Stockard's laboratory in New York in 1919, saw the experiments in being, examined many scores of animals, and was much impressed by the thoroughness and validity of the work done.

[2] Cole & Davis. *Science, N.S.*, vol. 39, p. 476.

[3] Bertholet. *L'influence de l'alcoolisme chronique sur les organes de l'homme, et sur les glandes reprodutrices en particulier.* Lausanne, 1913. Also communications by the same author to the International Congress on Alcoholism at London (1909) and at The Hague. Arlett & Wells. *Journal of Experimental Medicine*, vol. 26, p. 769 (1917).

As against this mass of concordant evidence there can only be set the negative facts that in some breeding experiments the offspring of alcoholised animals have been normal, just as the children of drunkards are frequently normal, and that in chronic poisoning with alcohol, whether in man or in the lower animals, the genital glands in many instances appear quite healthy. Such negative facts do not, however, furnish any ground for questioning the positive results obtained by observation and experiment which satisfy the necessary conditions of scientific proof. They merely show that it requires a certain intensity of poisoning, varying certainly with the species, and probably with the individual, to cause serious damage to the germ-cells. This consideration also disposes of the common objection that if alcohol were really an important agent in racial degeneracy, the living descendants of the hard drinkers of the eighteenth century should all be mental defectives. This might be a valid argument against the theory that the moderate drinking of alcoholic beverages damages the stock, but it is not relevant to the view which attributes such an influence only to marked degrees of parental intoxication; whole communities do not suffer from chronic alcoholism. It is further necessary to distinguish between chronic "soaking" and occasional (convivial) excess.

Effect on the Offspring of Acute Alcoholics at the time of Conception

In addition to the effect produced by its continued action in chronic intoxication, alcohol has also been credited with a special power of injurious influence when present in the blood in excessive amount at the time of conception (acute blastophthoria of Forel). There are obvious difficulties in obtaining and interpreting evidence bearing on this theory, and it does not

appear to be of sufficient practical importance to call for any detailed discussion in this Report.

Maternal Alcoholism in relation to the Health and Vitality of Offspring

The effect of alcoholism on the germ-cells is obviously reinforced, in cases of maternal intoxication, by the action of the poison on the developing embryo during pregnancy; and there is a certain amount of clinical evidence to show that this latter action may be extremely serious. It was pointed out many years ago by Matthews Duncan that still-births and abortions occur with special frequency in women of alcoholic habits, and his opinion on this point has been generally endorsed by other medical authorities. In one series of observations,[1] in which a comparison was made between the offspring of drunken mothers and of sober mothers of the same stocks, it was found that the proportion of children who were born dead or who died in the first two years of life, in the alcoholic families was 55·2 per cent., in the sober families, 23·9 per cent. It was further observed in the alcoholic families that there was a progressive rise in the rate of still-births and of deaths in infancy from the earlier to the later born children, as shown by the following figures—

	Cases.	Still-births. Deaths in Infancy. Per cent.	Still-births. Per cent.
1st born	80	33·7	6·2
2nd born	80	55·0	11·2
3rd born	80	52·6	7·6
4th and 5th born	111	65·7	10·8
6th to 10th born	93	72·0	17·2

The type of alcoholic family suggested by these figures—a type characterised by a regular decrease of vitality in the successive children—was frequently realised in individual cases, as, for instance, in one

[1] Sullivan. *Journal of Medical Science*, 1900.

observation where the first three children were healthy, the fourth was of defective intelligence, the fifth was an epileptic idiot, the sixth was born dead, and finally, the reproductive career ended with an abortion.[1]

Parental Alcoholism as an Environmental Influence in relation to Infant Mortality

There are obvious difficulties in differentiating the indirectly injurious influence which parental alcoholism may exercise on child-life, through the deterioration of the home environment. It will be generally admitted that alcoholism contributes to aggravate bad housing, inadequate and inappropriate feeding, neglect of sanitary conditions and so forth, but its interaction with these various influences is so complex and intricate that it is impossible for the most part to assess its definite share in their causation and in their consequences. There is, however, one category of infantile deaths in which the rôle of parental intemperance as an environmental factor is sufficiently clear and predominant to allow of a more positive conclusion and statement. It is the category of deaths from suffocation in infancy. Prior to the war one of the most striking and characteristic features of the statistics of deaths of infants from suffocation in England and Wales was the fact that a very disproportionate number occurred on Saturday nights. As drunkenness was also notoriously more frequent on Saturdays than on any other day of the week, it was natural to suspect that parental intoxication was an important factor in bringing about these fatalities. If this theory be correct, it follows that a reduction of drunkenness should produce two results—it should reduce the total number of deaths of infants

[1] Dr. Mjöen of Christiana has given a similar case of a family with a long history of longevity and marked vitality, with similar progressive deterioration.

from suffocation, and it should lead to a more even distribution over the week of such cases as still occur.

The following tables show that this is precisely what has happened during the war. In the period from 1913 to 1918, drunkenness amongst women decreased by eighty per cent., and, coincident with that fall, deaths of infants from suffocation decreased by over fifty-six per cent., and the incidence of such deaths on Saturday nights, which amounted to 26·3 per cent. in 1913, declined to 17·0 per cent. in 1918—little more than the proportion which would occur if they were evenly spread over the week. As there does not appear to be any other influence which could simultaneously produce *both* these results, they can only be accounted for on the view that maternal drunkenness was, in fact, the predominant cause of the mortality of infants from suffocation, and that the decrease of such mortality was due to the decrease of female intemperance.

CONVICTIONS OF WOMEN FOR DRUNKENNESS AND DEATHS OF INFANTS UNDER ONE YEAR FROM SUFFOCATION, 1913–1918

England and Wales

	1913	1914	1915	1916	1917	1918
Convictions for Drunkenness.	35,765	37,311	33,211	21,245	12,307	7,278
No. of Children Born.	881,890	879,096	814,614	785,520	668,346	662,661
Deaths of Infants from Suffocation.	1,226	1,233	1,021	744	704	557

DEATHS OF INFANTS FROM SUFFOCATION—PERCENTAGE DISTRIBUTION OF CASES OVER THE SEVERAL NIGHTS OF THE WEEK IN 1913 AND 1918

	Sun.	Mon.	Tues.	Wed.	Thur.	Frid.	Sat.
1913	14·1	12·8	10·1	12·1	10·7	13·6	26·3
1918	14·3	10·4	13·1	15·6	13·8	15·6	17·0

Summary and Conclusions

The evidence summarised in this section establishes beyond question the fact that parental alcoholism is capable of exercising an injurious influence on the birth-rate, both from a qualitative and from a quantitative point of view. It is a more difficult matter to arrive at any estimate, however rough, of the actual effect of that influence on the growth of population and on the prevalence of conditions of degeneracy in the community. There are no distinct characteristics by which mortality in ante-natal or neo-natal life, or conditions of mental defect in surviving children can be definitely set down to the account of parental alcoholism, and therefore its effects cannot be measured as can the effects, for instance, of parental syphilis.

Again, as far as effective fertility is concerned, alcoholism is, or may be, connected in a variable degree with other factors of the problem, either to reinforce or to diminish their influence. Thus, as pointed out in the section dealing with venereal disease, there is general agreement that alcoholic excess tends to promote the spread of these diseases, though its effect is difficult to measure. On the other hand, it probably counteracts to some extent the practice of voluntary control of conception. In view of the complex interaction of these and other varying factors, it would be hazardous to draw any definite conclusion as to the net quantitative effect of parental alcoholism on the population, or as to its importance in comparison with that of other detrimental influences. On the whole, however, it would appear antecedently probable that its racial effects, under conditions obtaining in Western civilisation, are more important qualitatively than quantitatively, and this for two reasons: first that, when alcoholism reaches such an intensity as to do serious

damage to the germ-cells, the drinker in most instances is in a relatively late stage of his reproductive career, and, second, that it is only in a comparatively small proportion of the population that it reaches this intensity. While, therefore, parental alcoholism is certainly a cause of ante-natal and neo-natal mortality, its influence in this direction is so obscured by other causes that fluctuations in the amount of alcoholism within a given community do not necessarily produce corresponding fluctuations in infant mortality. In modern civilised communities, at all events, it is not a significant cause of depopulation. In this connection it may be noted that in France the departments showing a considerable excess of births over deaths include several with a very high per cap. consumption of alcohol, and, conversely, many departments with a decreasing population have a very low alcohol consumption.

On the quality of the race, on the other hand, alcoholism may be expected to exercise a more important influence, as the introduction, even into a relatively small number of stocks, of a taint which biological experiment shows to be heritable, should presumably have a continuing and cumulative effect. It is, therefore, as a racial poison making for degeneracy, rather than as a factor in decreasing fertility, or increasing infant mortality, that alcohol more particularly concerns this Commission. The importance from this point of view is the greater because, while other factors of degeneracy are for the most part unknown, and as far as they are known are difficult to counteract, alcoholism is susceptible of immediate and effective control. That it does admit of such control has been definitely established, in the opinion of the Commission, by the decrease of drunkenness, and of all other assurable manifestations of alcoholic excess through the

State regulation of the liquor traffic in Great Britain during the war.

DRUNKENNESS AND OTHER ALCOHOLIC PHENOMENA DURING THE WAR
1913–1918

Year.	Convictions for Drunkenness.		Deaths from Alcoholism.		Deaths from Cirrhosis of the Liver.		Attempted Suicide.	
	M.	F.	M.	F.	M.	F.	M.	F.
1913	153,112	35,765	1,112	719	2,215	1,665	1,458	968
1914	146,517	37,311	1,136	680	3,226	1,773	1,336	1,049
1915	102,600	33,211	867	584	2,107	1,525	792	816
1916	62,946	21,245	620	333	1,823	1,163	509	436
1917	34,103	12,307	358	222	1,475	808	483	452
1918	21,797	7,222	222	74	1,092	579	410	400

These results were obtained by regulating the hours and conditions of drinking on physiological principles, so as to secure three main ends, viz.: "(1) The discouragement of the use of beverages of excessive alcoholic strength; (2) avoidance of drinking alcohol on an empty stomach; and (3) avoidance of continuous or frequently-repeated drinking of alcoholic liquors" (Lord D'Abernon, Scientific Basis of Drink Control).

Inasmuch as the reduction of alcoholism which has been brought about through this system of regulation appears, from all statistical evidence, to be greater than has been obtained by any other methods of control tried in this country or elsewhere,[1] and since its beneficial results have not been accompanied by any of the countervailing evils which may attend some of these alternative methods, the Commission strongly recommend that the essential features of this system be made permanent by legislative action.

C. LAWS OF MARRIAGE AND DIVORCE

The Committee heard evidence of Sir A. Conan Doyle, M.D., President of Divorce Law Reform Union, and Mr.

[1] MJÖEN. *Problems of Eugenics* (Report of First International Eugenics, London, 1912).

Cecil Chapman, Magistrate of Westminster Police Court. Their evidence may be summarised as follows—

(*a*) The fact that a large number—500,000 at least—of separated people are not allowed by law to remarry has as its consequences—

1. A diminished birth-rate. Since fifty per cent. of divorced people remarry it is presumed that a similar proportion of separated people would do so if they could. Allowing three children to each family, these marriages would in a few years produce more then 750,000 persons.

2. Illegitimacy. Where marriage is debarred many live in a condition of concubinage. The lot of illegitimate children is extremely hard, the death-rate among them being particularly high. The State should therefore do all it can to discourage conditions that lead to illegitimacy.

3. Immorality. Illicit intercourse is indulged in by many who are separated and prohibited from remarriage.

4. Lowering the view of marriage. Where legal marriage is debarred concubinage is held to be as good as marriage, and marriage itself is brought into contempt.

(*b*) It is a mistake to think that separated people often come together again. Only about ten per cent. are reconciled. Many reconciliations that are effected prove failures.

(*c*) It is not proposed to make divorce easy, but to facilitate the dissolution of the legal bond of marriage where the real union has been broken. "Divorce is not an evil, but a remedy of evil."

(*d*) All that should be necessary to procure a divorce of separated people is to show to a judge that the parties have been separated for a period of years (three or five), and that the cause of their separation was justifiable. Insanity should be regarded as a sufficient cause of divorce after a lapse of years.

The Commission, without endorsing the foregoing evidence, offers the following conclusions—

1. That there is need for reform of present marriage law, which presses unjustly on women, and that the sexes should be treated equally.

2. That mere absence of cohabitation for a period of years is not itself a sufficient reason for divorce. It is essential that divorce in every case should be the result of a judicial determination.

3. That religious communities cannot be expected to surrender the right of determining the conditions under which they will allow the religious rite to be performed, or recognise the dissolution of the marriage bond for their members.

4. That the distinction between the religious rite and the legal contract of marriage should be recognised; that the legal contract should assume a more impressive character; and all citizens who live together as husband and wife should regard it as a moral obligation to submit to the legal contract, whatever be their views on the religious rite.

5. That since divorce seriously affects the interests of children, special regard to their welfare must be given by the Court in every case.

6. As the preceding recommendations deal with the marriage law, we do not think it out of place to add a recommendation dealing with a matter referred to in the Report at p. lxx, that the subsequent marriage of the parents should make their children legitimate.

Section V

SUGGESTED OUTLINE OF FURTHER INQUIRY

I. The Development and Education of Young Citizens for Worthy Parenthood

In concluding the present inquiry into the factors which may affect the birth-rate in the United Kingdom, the National Birth-rate Commission have been compelled to leave over certain important aspects of the problem for future investigation. Among these perhaps the most important is the question of the development and education of the young citizen for worthy parenthood. Hitherto this important sphere of human life has been largely left to chance adjustment under the sway of emotional impulse. Seeing, however, the high value which Nature, operating through evolution, has set on racial quality, it is evident that those communities which neglect to apply to this problem constant thought and wise action must inevitably suffer when confronted in a life-and-death struggle with nations which have taken adequate steps to promote the welfare of their young citizens, and by so doing to safeguard the future of their race.

If quality, and not mere quantity of human life in the next and succeeding generations be, as it must, our chief aim, then it is clear that a recognition of the value of worthy parenthood must influence our methods and guide our actions in the training and developing of our citizens from infancy onwards through adolescence and the reproductive age. Nay, more, in order to include

in this inquiry those hereditary qualities of mind and body on which racial welfare ultimately depends, it would be necessary to go further back still, and commence with the germ-cells from which these individuals themselves originated, and consider the many influences to which they have been exposed during early growth and independent existence. For practical purposes, however, it would be found necessary to limit any future inquiry in this matter to the present generation of potential parents, and consider only those influences which, arising within the organism, or affecting it from outside, favour or retard bodily and mental development in so far as these are concerned with the attainment of worthy parenthood.

Although the important changes which take place at puberty would claim a large share of attention in this inquiry, yet we must remember that the physical and psychical developments which are so manifest at this period are themselves the outcome of gradual and less evident processes which go on during infancy and youth. Hence it is necessary to consider all the environmental influences which act on the body and mind of the growing child, and favour or hinder the healthy development of the sex organs, and through these of the secondary sex characters which affect the body, and also the intellectual and emotional attributes which originate in, and develop around the sexual life. For it is on the controlled and harmonious development of these emotional states, under the stimulus of the secretions of the sex-glands and other organs, that a right and healthy relationship between the sexes and the attainment of worthy parenthood so largely depend.

It is no doubt true that our knowledge is limited concerning the way in which the sex-glands and other internal secreting organs affect bodily development in the male and female, and in which, by affecting the

nervous centres with their secretions from puberty onwards, they arouse those mental and emotional states in the central nervous system which form the atmosphere of the sexual life. But we are not fully applying such knowledge as we already possess, and there is an urgent need for a large reconstructive effort in our scheme of national education and character formation in this important department of human life.

Although the war, and the social and other conditions dependent on the war, have been the exciting cause which has brought about the lowered standard of sex morality and the increased prevalence of venereal disease in the civil population which we all deplore, it is also true that as a nation we are suffering to-day because we have omitted in the past to instruct our boys and girls in sound principles of sex hygiene and sex morality, and have failed to set before our young citizens worthy ideals of citizenship and of the duties and responsibilities of parenthood. It is indeed highly probable that this relaxing of the standard of sex morality will prove, in the long run, to be a greater menace to family life and racial stability than even the higher incidence of venereal disease. The latter can be prevented and cured by appropriate remedies, the former belongs to the realm of character formation, and this is a far more difficult problem.

It may be useful at this stage to indicate in outline the lines on which any future inquiry into the influences which affect the welfare of our young citizens as potential parents should proceed. It must embrace the development of the individual from the physiological and the psychological standpoint. It must take notice of the conditions under which the adolescent citizen lives and works, and the social and moral influences to which he or she is exposed, especially at puberty and onwards. It must include the extent to which worthy ideals of

citizenship and parenthood are inculcated by education in its widest sense, by religious influence and by the atmosphere of the home, the school, the university, the workshop and the factory.

A. The Physiological Aspect

Medical knowledge has thrown much light on the powerful influence which the primary sex-glands (the testis and ovary) exercise on bodily growth. The results of the removal of these organs and of their atrophy from disease have demonstrated, both in man and animals, the close association which exists between the functional activity of these glands and the orderly unfolding of the secondary sex characters—the muscular development, the character of the voice, the growth of hair, and all those bodily features which we regard as characteristic of sex in the male and female. We now know that a number of other glandular structures belonging to the group of the internal secreting organs also take a large share, with the sex-glands, in moulding bodily development along the same lines. Although we can recognise an association between the functional activity of certain portions of the pituitary and suprarenal glands and the development of male or female characteristics, we are still ignorant as to the chemical composition of these growth-influencing secretions and the nature of the co-operation between these various organs on the one hand, and the sex organs on the other. At the same time, the facts which have been established concerning the effects of disease of the thyroid, the pituitary and the suprarenal glands on bodily and mental development in the individual, warrant the conclusion that the healthy and correlated activity of all these organs is absolutely essential for healthy growth of body and mind. We also know that, in addition to their influence on bodily growth, these same glands, through their internal

secretions, largely influence the emotional and other psychical phenomena which play so large a part at puberty and throughout the sexual life of men and women.

The Dual Function of the Sex-glands.—It is not sufficiently appreciated that the primary sex-glands, the testis and the ovary, perform a dual function. The one is concerned with the formation and liberation of the male and female germ-cells, and has to do with the perpetuation and welfare of the racial life; the other consists in the formation of a secretion which does not leave the body, but is absorbed into the blood-stream, and so reaches the nervous system and other parts of the body. The capacity to form this internal secretion undergoes a marked increase at puberty, and persists throughout reproductive life uninfluenced by conscious control. It is this secretion which so largely affects the welfare of the individual, and is associated with the development of those secondary sex characters of the body, and those emotional attributes of the mind, which we regard as characteristic of the male and female sexes. A fuller knowledge of these important physiological facts on the part of youthful citizens, teachers and guardians of the young, and the public generally, would tend to promote a higher standard of sex morality.

Bearing in mind, then, the important share taken by these internal secreting organs on the mental and bodily development of the young citizen as a potential parent, it becomes very necessary to inquire into the effect of diet; of poisons like alcohol and those of venereal disease; of nervous strain, and other unhealthy conditions of life on the growth and function of these important structures.

With regard to the effect of diet, McCarrison and others have investigated the action of certain accessory food factors on the reproductive organs. We may here recall the evidence supplied by the social insects on

this point. In the Hymenoptera the female larva, up to a certain age, can be directed along sterile or fertile lines of growth, according to the nature of the food supplied. Future inquiry may show that the fertility-producing constituent in the " royal jelly " which determines the development of the queen bee consists of a vitamine. Professor Hopkins has suggested that the various accessory food factors may act by stimulating the organs of internal secretion. Rickets is now known to be a " deficiency disease," and through its deforming effects on the bony framework, especially the pelvis in the female, materially adds to the difficulties and dangers of child-birth. The diet of the expectant and nursing mother also becomes very important from this point of view, in respect of the extent to which the extra supply of vitamines necessary under the double strain of pregnancy and lactation is safeguarded, for it is now especially that the embryo and the infant are wholly dependent on the blood and milk of the mother. While there is abundant need for further research in this field, such knowledge as we already possess should be available for all who are interested in the welfare of the young.

For we have now adequate grounds for believing that a sufficient and healthy diet, containing the essential accessory growth factors, together with adequate oxygenation of the tissues of the body by fresh air and exercise, have an important influence on sex development and fertility, and these, again, have a very important bearing on the welfare of the growing citizen in relation to worthy parenthood.

B. The Psychological Aspect

Although the gaps in our knowledge may not be so evident in this as in the physiological side of the inquiry, the practical difficulties are still great in applying the

knowledge we have to the best advantage in the training of our young citizens for worthy parenthood. The difficulty arises in this, as in so many other fields of human activity, partly from faulty educational methods and false social traditions, and partly from a certain inherent antagonism of biological origin between age and youth and parent and child. Parents often experience great difficulty in instructing their children with tact, sympathy and knowledge concerning the physiological facts and the ethical principles which should underlie right relationship between the sexes. As a matter of fact, partly owing to ignorance and partly to lack of appreciation of the importance of the subject, parents are not to-day educating the children of our country in the all-important subject of sex hygiene. The question therefore arises as to the best method of providing this instruction on wise and sympathetic lines for our boys and girls before they leave the home and the school world, and enter on the wider experience of life with its many dangers and pitfalls. The extent to which instruction on sex matters can be usefully given by selected and trained teachers to school-children of selected age would form a subject for future inquiry. This must also include a consideration of the advantages and disadvantages of co-education for boys and girls, and the extent to which the educational influences of the theatre, cinema, music-hall, and other places of recreation and amusement are helping to establish in the minds of our young citizens true ideals of family life and worthy parenthood. It is certain that we shall not be able to set up these true ideals until we begin with the children. By whatever method, however, the instruction of the young citizen is brought about, the guiding principles must be the same in all cases. These must ensure truthfulness and mutual confidence between young and old, parents and children.

Repression, mental shock and abrupt transition must be avoided. The child must be encouraged to ask for solutions to difficulties and for explanations as to the significance of the bodily changes and emotional states which occur at puberty and onwards. The instruction given to children on these important sex subjects must be gradual and continuous. The child-mind must be prepared by Nature-study and biological teaching for the more detailed physiological instruction at an older age, and this must be succeeded by a full knowledge of the value of sex morality to the individual and to the nation, and the nature and results and means of prevention of venereal disease.

Much more might be done from the eugenic point of view if parents would encourage and develop in their children higher ideals as to the racial aspect of marriage and parenthood, and the importance of character and fitness in the partner of their choice.

Finally we must not forget that any inquiry into the development of the young citizen as a potential parent would be incomplete which did not include the influence of recreation. Around the world of work lies the atmosphere of play. It has been well said that play is "a rehearsal of the business of life." It is not possible here to trace in detail the evolution of the playing instinct from its individual stage in the young child through its competitive and co-operative phases in the growing boy or girl. Inasmuch, however, as play is "a form of energy release," the wise encouragement and organisation of healthy recreation, especially in its communal and co-operative aspects, for boys and girls and young men and young women, will not only tend to neutralise the vicious effects of unhealthy amusements, it will also help to prevent the morbid introspection which, in sensitive persons, often obscures the wider horizon which opens out at puberty.

In attempting to solve the problem of worthy parenthood it is necessary to keep constantly in mind certain fundamental differences which naturally distinguish the boy and girl, the man and woman. There is no doubt that Geddes and Thomson are essentially right in regarding the development and metabolism of the male as taking place on a relatively more katabolic plane than that of the female. The transformation of energy taken in in the shape of food, into energy given out in nervous and muscular effort, is more active in the male than in the female. The woman, on the other hand, normally lives on a more conservative, a more anabolic plane. Her expenditure of nervous and muscular energy must relatively be less if and when large reserve stores are to be laid up for the support of the embryo in the womb and the infant at the breast. The employment in industry of so many young women of marriageable age, and of expectant and nursing mothers, is a matter of vital concern to the nation, and deserves much more serious attention than it has yet received. The influence of the various industrial occupations on fertility and on healthy parenthood should also form a subject for further inquiry. It may indeed happen that by exchanging an essentially feminine for an essentially masculine outlook on life, our young women, our wives and mothers, may be unknowingly prejudicing the interests of their children, and through them the welfare of the race. Perhaps this tendency to reverse the old relationships is itself only a symptom of a deeper movement in the life of the nation, and in this connection the present numerical inequality between the sexes, with the large preponderance of the female sex in our population, is a matter of considerable significance. However this may be, the poet's line: "*Felix qui potuit rerum cognoscere causas*," applies to nations as well as individuals. If we are to recognise and

understand the disharmonies which now exist in the sexual life of men and women, as in other fields of human activity, we must set about collecting the data and the facts which bear upon them.

II. Sociological Problems

The above questions have been defined as physiological and psychological. The function to be served by a Commission such as ours is evidently not the inquiry into matters which belong to the sphere of laboratory experimentation; its sphere is the sociological, and the relation of the physiological and psychological thereto.

A survey of our first Report of 1916 and that which is here concluded would appear to indicate the following amongst the problems to which attention needs to be given, in addition to those indicated in the foregoing.

The first task, and one which by its nature is unending, is statistical. The fertility results of the 1911 census are not yet wholly published, though it is hoped that they soon may be. They are the first of their kind ever inquired into and obtained. They would require interpretation, a task which might well concern inquirers until the date when it would be possible to compare and contrast those figures with the new figures which will be obtained in next year's census—showing, as we already know they must, the most momentous and extreme differences, in vital particulars, as a consequence of many causes, but chiefly of the unexampled tragedy enacted during the decade.

It is to be hoped, also, that imperial figures will be available, on the lines recommended elsewhere in this Report. The questions of the distribution of the imperial population, both as regards absolute numbers and as regards the sex-ratio; its relation to local food-supply; and the facts, factors and principles

of intra-imperial migration might then be considered in the thorough fashion which we have hitherto found impossible.

It becomes increasingly evident that inquiry must be made into a fundamental matter which the census will, we fear, not cover—the relation of religious profession to the birth-rate (*see* p. xliii).

Closely related to the foregoing statistical questions is that of the relation of housing accommodation to parenthood. An examination would be needed into the possibilities involved in methods of co-operative or communal housing, national kitchens, the provision of nursery schools, home helps and so forth; and it would also be necessary to investigate and insist upon the still-neglected need for explicit provision for children in the nation's new houses.

The economics of parenthood requires extensive further investigation. The principles which we have already advocated are receiving tardy and extremely inadequate recognition in the recent modifications of the incidence of income tax, and in proposals for widows' pensions. These subjects must be further studied, preparatory to the required investigation into the fundamental and formidable proposition which may be regarded, according to the point of view, as endowment of motherhood or endowment of childhood.

It is evident that the recent raising of the school age tends to aggravate the urgency of these economic problems of parenthood. And, further, the new discoveries in diet, and its importance for maternity and childhood, involve serious economic considerations, as is evident if we compare the price of butter, rich in the first growth-vitamine, so valuable for the expectant and nursing mother and growing child, with that of vegetable margarine, which is destitute of this essential growth-factor.

Whilst ante-natal research has not been our function, we welcome the establishment of an Ante-Natal Investigation Committee by the Medical Research Committee, and anticipate results of the highest value therefrom. It is already known that factors are involved—in ante-natal life and death, health and disease—which are capable of social control, such as the fatigue or injury due to employment of expectant mothers, alcoholism and venereal infection. To these social aspects of ante-natal life inquiry must be directed in order to define the principles of social action for ante-natal hygiene. Evidently the bearing of social action in other countries, such as Prohibition in the United States, upon these problems, must be duly estimated.

When the fertility records of the census of 1911 and 1921 are available, it will be possible, as never hitherto, to study the long-vexed questions of the relation of fertility to the education and the occupation of women.

Data of extreme importance will accrue from the census now being taken in the United States, and from the Depopulation Commission of France, which has been so long delayed in its work, but now has resumed its inquiries; so that it will be possible for such studies to assume that international aspect for which we hoped too soon when contemplating the work before us in 1918.

H. R. Birmingham.
A. E. Garvie.
Mary Scharlieb.
C. W. Saleeby.
J. W. Ballantyne.
Edward Brabrook.
W. F. Brown.
C. J. Bond.
A. L. Broome.
A. K. Chalmers.
Mary H. Clay.
R. J. Drummond.

Lettice Fisher.
F. E. Fremantle.
A. G. Gardiner.
Hermann Gollancz.
H. Rider Haggard.
R. F. Horton.
F. B. Meyer.
Alice M. Michelmore.
Charles Porter.
Eric Pritchard.
George Reid.
J. D. Robertson.
Amand Routh.
A. T. Schofield.
Marie C. Stopes.
T. Sykes.
Willoughby de Broke.
Marie Willoughby de Broke.
G. Sims Woodhead.
James Marchant.

NOTES OF RESERVATION

THE VOLUNTARY RESTRICTION OF THE BIRTH-RATE

I

We, the undersigned, have assented to the statement in the Report of the argument for and that against the use of contraceptives, as we desire that the moral problem involved should be fully and fairly considered; but we now feel morally bound to record our dissent from the argument for, and our assent to the argument against such use. Further, although we recognize that a reckless increase of the population is not to be desired, we hold the opinion that every effort should be made to arrest the decline in the birth-rate.

Alfred E. Garvie.
Robert F. Horton.
Mary H. Clay.
Mary Scharlieb.
A. G. Gardiner.
Hermann Gollancz.
Alfred T. Schofield.
W. F. Brown.
J. D. Robertson.
Robert J. Drummond.
Amand Routh.
Tom Sykes.

II

Subject to the general proviso contained in the preface I have signed the report; but with the following specific reservations—

(*a*) The Church forbids all anti-physiological methods of preventing conception.

(*b*) Christian marriage duly contracted and consummated cannot be dissolved but by death.

W. F. Brown.

We subscribe to (*b*)—

MARY SCHARLIEB.
MARY H. CLAY.

III

Medical evidence has been given that all unnatural modifications of marital association, and all artificial contraceptive methods by mechanical or chemical contrivances, if habitually employed by normally constituted individuals, are harmful. Routine interference with the spontaneity of so important a physiological function will sooner or later produce varying degrees of physical and mental exhaustion, often associated with lack of concentration, loss of memory, and increasing irritability and unrest, so that marriage may cease to be a satisfied bond of union.

H. R. BIRMINGHAM.
AMAND ROUTH.
MARY SCHARLIEB.
A. K. CHALMERS.
MARY H. CLAY.
R. F. HORTON.
W. F. BROWN.
HERMANN GOLLANCZ.
ALFRED E. GARVIE.
ALFRED T. SCHOFIELD.
J. W. BALLANTYNE.

IV

Medical, scientific and other evidence has been given that unnatural modifications of marital associations and most artificial contraceptive methods at present employed are harmful, but that the use of the best contraceptive methods is much less detrimental than any other course open to millions of people. The routine interference with the spontaneity of so important a physiological function as the sex act does not take place with the best contraceptive methods; and the

physical and mental exhaustion, often associated with lack of concentration, loss of memory, and increasing irritability and unrest which cause marriage to cease to be a satisfied bond of union, are chiefly due to the use of "self-control" in the form of "coitus interruptus," of improper preventatives or of unnatural abstention.

MARIE CARMICHAEL STOPES.
MARIE WILLOUGHBY DE BROKE.
WILLOUGHBY DE BROKE.
CALEB WILLIAMS SALEEBY.

MARRIAGE CERTIFICATES

WE must not only withhold our signature, but argue against Certificates of Health for Marriage, the absence of which would make it possible for any authorized person to prohibit marriage, and would be gravely detrimental and not advantageous. We consider that the law should be changed to allow a doctor to inform either party, or their parents and guardians, of the true state of health of the proposed spouse, but the possession of the reverse of such a certificate should in no way be involved with legal marriage, as it would only add one more difficulty in the way of legal marriage and a further inducement to substitute illicit unions.

H. R. BIRMINGHAM.
F. B. MEYER.
ALFRED E. GARVIE.
MARIE C. STOPES.
MARIE WILLOUGHBY DE BROKE.
WILLOUGHBY DE BROKE.
W. F. BROWN.
ROBERT J. DRUMMOND.

VENEREAL DISEASES

I

WHILE in general agreement with the Section of the Report dealing with Venereal Diseases, we, the undersigned, are not prepared to commit ourselves to the

support of any proposals that the means of self-disinfection should be freely supplied to the public generally, or that without further inquiry a system of compulsory notification should be adopted, as we fear that such a step might lead to a re-enactment of the Contagious Diseases Acts.

H. R. Birmingham.
Alfred E. Garvie.
F. E. Fremantle.
W. F. Brown.
J. D. Robertson.
Hermann Gollancz.
Alfred T. Schofield.
Mary H. Clay.
Lettice Fisher.
Robert J. Drummond.
F. B. Meyer.

II

We cannot endorse the views here expressed *re* the prevention of venereal disease, as we consider them evasive, confusing and not up to date. "Prophylaxis" by immediate self-disinfection is not sufficiently distinguished from early "treatment" at clinics. The moral objection to the former, so dogmatically expressed in one part, appears to be removable should that method prove effective, but no instruction to ensure its success is advocated.

The needs of rural areas are ignored, clinics in urban districts only being recommended, though the provision of these is admitted to be "obviously impossible."

Willoughby de Broke.
Marie Willoughby de Broke.
Marie Carmichael Stopes.
Caleb Williams Saleeby.

III

I dissent from the suggestion that the terms of the Venereal Disease Act, 1917, be relaxed without further

experience as to their value. The suggestion is based on a quite unsupported anticipation that self-disinfection will prove more effectual in preventing the spread of disease than early-treatment centres. Both, to my thinking, are counsels of despair of the continued evolution of sex morality, and the suggestion is contrary to the spirit of other paragraphs in this section of the Report.

A. K. CHALMERS.

IV

On the problems dealt with in the section headed "The Treatment of Venereal Disease" I reserve my opinion. I did not hear the evidence on these points, as it was given before I joined the Commission, and I feel that the issues involved are so tremendous that it would be wrong to subscribe to any definite views concerning them without further knowledge and most careful consideration.

H. RIDER HAGGARD.

DIVORCE

WE wish to support the views of Sir A. Conan Doyle and Mr. Cecil Chapman on the subject of Separation and Divorce.

MARIE WILLOUGHBY DE BROKE.
WILLOUGHBY DE BROKE.
CALEB WILLIAMS SALEEBY.

ALCOHOL

I TAKE exception to the terms of reference to the Central Board, as I believe nothing short of prohibition of the manufacture, importation and sale of alcoholic liquors meets the case.

ROBERT J. DRUMMOND.

PART II

MINUTES OF EVIDENCE

First Day

Monday, May 13, 1918
at 20, Bedford Square, W.C.

The Bishop of Birmingham (*President*) in the Chair

Statement of Professor Arthur Keith, D.Sc.

Professor Keith. In the year 1903 an inter-departmental Committee was appointed to consider the question of physical deterioration. It was appointed first because General Sir Frederick Maurice, father of the present General, wrote an article in the *Contemporary Review* (Jan. 1902) declaring that there was a great degree of national deterioration, and it was to this extent, that of five men who offered themselves to the army as recruits, only two of them turned out to be physically efficient as soldiers. That meant that the others were rejected because they were physically unfit. Now, that was his statement, and in the next year (1903) the Director-General of the Army Medical Service, Sir William Taylor, gave statistics for recruiting for the ten years before, showing that it was not quite so bad as Sir Frederick Maurice had made out, although it was bad enough, as forty per cent. of the men during the previous ten years had to be rejected because they were physically unfit. Then a Royal Commission was appointed to consider "Physical training in Scotland." That turned out to be a very important Commission. It found, in the first place, that thirty-one per cent. of the men offering themselves as recruits in Scotland were unfit, and, in the second place, twenty-eight per cent. of the Edinburgh children in the public schools of Edinburgh were poorly nourished and were suffering from physical deterioration because of imperfect food. Then, when it came to measure and compare samples of modern Scotch children, it found there was no standard with which

such children could be compared. Those three things came together : General Maurice's statement, the statement by the Surgeon-General of the Army Medical Service, and the report of this Royal Commission for Scotland. That led to the appointment of this inter-departmental Committee in 1903, and in 1904 the Committee issued a report which is the most valuable report which has ever been issued dealing with the physical condition of the people. There was no evidence one way or the other to say whether or not there was any degree of physical deterioration, but it said it was an extremely important thing that this country should get to know the physical condition of its people, because on that depended so very much the future of the country. There was only one way to learn whether we were going downhill or not, and that was by taking a census. The Committee recommended that a census of the people should be taken, and outlined a scheme by which it should be taken. It recommended the scheme of survey very strongly, but it was put in a pigeon-hole and nothing came of it. The Anthropological Section of the British Association and the Royal Anthropological Institute urged the Government in 1905 and 1906 to take this matter up, as it was really urgent, but those in authority said they thought parents might be upset by the measurement of children.

In 1908 the Act which empowered compulsory examination of school children was passed, and that really led to the beginning of an anthropometrical survey, because now in the schools of England and of Scotland about two millions of children are examined every year, and in that way—although that is a rough medical examination—to a certain extent the physical condition of the children is observed. In reality one very big part of this survey has actually begun, but I would not say that the scheme as carried out is perfect. It is yielding results, as one can see from the reports which are issued by the Board of Education every year. In 1914 the Chief Medical Officer of the Board of Education reported that all children between eight and nine years of age and between twelve and thirteen years of age, one million nine hundred thousand in number, were medically inspected and a certain number measured and weighed. I think the arrangement at present is that the school children are examined at two stages, the first being between eight and nine years of age and the second between twelve and thirteen years of age, so there are two groups of children examined every year. I am quoting from the 1914 report of Sir George Newman. As a matter of fact, it is a very rough examination,

which leads to a certain amount of data, not sufficiently detailed to serve as a basis or standard. Then nothing further happened in connection with the proposed survey until about two years ago. At that time—it was in the opening of 1916—the Royal Society called together all the scientific societies of this country, and they formed a conjoint Board, the main object of which was to place at the disposal of the Government all knowledge that lay within the bounds of these societies. Almost the first matter it took up was the need of a survey of the British people. It may be of interest if I mention the names of some of the members of that Committee, because it will give you a better idea of the scope of its work. Major Leonard Darwin is the Chairman. It was found that there must be on that Committee representatives of the various Government departments involved; such representatives were duly nominated. The Board of Education sent Sir George Newman; the Local Government Board sent Sir Arthur Newsholme; the Ministry of National Service sent Sir James Galloway; the Registrar-General, whose department is naturally interested in this scheme, sent Dr. T. H. C. Stevenson; expert anthropologists and anatomists were also nominated. That Committee set to work, and I want just in a few words to say what results we have had. (The result so far as we have gone has been surprisingly good.) The Board of Education was very willing to have a survey of children made, and the Local Government Board was also willing to help. Sir Auckland Geddes, the Minister of National Service, is extremely interested in the matter, and desires that this survey should be undertaken as part of the routine work of the Medical Boards appointed by the Ministry. The Committee is still sitting, but certain of its proposals I may lay before you. The first is that each Government Department should carry out its own survey; the Ministry of National Service as a matter of routine has to survey every man who presents himself as a recruit at the age of eighteen up to fifty years of age. You might naturally think that this part of the survey has already been done. Well, it has not, because in the early part of the war things were done so hurriedly that the data gathered then is really not reliable data. Nor were the methods of measurement of a uniform standard. I doubt whether you could compare the statistics then taken in one part of the country with those taken in another part. The survey, however, has really come into being; it only wants co-ordination. I can say the same with regard to the Board of Education; children are being surveyed in a way.

There are also the older or factory children, who are under the control of the Home Office. The Home Office is willing that factory surgeons should survey such children. From all these different sources, if we could co-ordinate the methods employed, we would get together the data we want. If in any selected district we could obtain statistics from children in the schools, and then those for adults from the Ministry of National Service and so on, we should have data bearing upon the manhood of the country. We do not quite see how we can get measurements so far as women are concerned; that of course is an important defect in our scheme. I admit there are a large number of women who have taken up service, say in the W.A.A.C., who might be available for measurement, but such a sample would not represent the general womanhood of the country. We need now, I think, all the public pressure we can possibly get behind us to carry the public with us, and force the scheme of a survey upon the Government. As to its importance, that cannot be over-estimated.

Besides the data forwarded by an anthropometrical survey, there is another source of evidence bearing on the question of physical deterioration. We know the condition of ancient and modern inhabitants of England from a study of their skeletons. I have made comparison with a number of skulls which have been taken from people who lived in this country at definite dates. I have taken the skulls of twenty-five men and twenty-five women who lived at different periods before the Norman times, and I have taken the skulls of a corresponding number of people living in England during last century. I compared the old and modern skulls, and I was surprised to find the number and the extent of alterations that had taken place. There is no doubt that some of these changes are detrimental changes. The point I want to make clear is that without doubt changes are taking place. More recently, owing to work I am doing for the Army Medical Department and the Army in connection with the examination of soldiers' wounds, I have had access to a great deal of first-hand information about the teeth, jaws, and bones of modern British soldiers, and I can assure you that in certain parts of England the state of the teeth and the jaws is alarming. There are changes taking place which we ought to investigate and to register. I have placed before you very briefly the position of matters as regards an anthropometrical survey. You will see that it is a matter which bears upon our national well-being in many ways. I should like to add that a survey of the same kind is being undertaken in the

United States. The United States Committee and our Committee are working together so that their results and ours may be comparable. It would be extremely interesting to see how we, the original nation, compare with our descendants.

1. COUNTESS OF SELBORNE. Are any methods taken to measure the children in the secondary schools?—Only in a way. There are many things to be done in surveying. We must survey the head form, because such measurements provide us with the means of analysing the racial elements which make up our present population. People will say: Why measure heads and go into details of only theoretical value? We think such measurements are necessary, and it is the only way we can get an idea of racial elements and of the growth changes of the people of the nation.

2. DR. SALEEBY. The idea of asking Professor Keith here was to get through him guidance for the information which might enable it to be suggested that there should be, as stated here, a permanent anthropometric department in what we hope to be the coming Ministry of Health. Now can you advise as to what we can do to effect the end that you want gained? In your judgment would it be a suitable thing for us to say that we think there should be a permanent anthropometric department in the Ministry of Health?—I think there ought to be, without any doubt at all, because that is the side of national health which is not taken into consideration now, and it is an extremely important one.

3. Do you know whether, in your judgment, there exists to-day in the absence of the data any adequate evidence upon which people can assert that certain valuable or valueless stocks are now reproducing out of proportion?—That is a matter I have not gone into very fully. I know the data does exist, but I have never looked into it. I agree it is an extremely important matter to look into.

4. Would it not be a very great help, at least to our inquiries into the eugenic aspects of the birth-rate, to have at our disposal a kind of data?—Very much so. Although I have no exact data for it, I have been told by men who ought to know that certain towns and cities in England are reproducing far beyond the proportion, physically degenerated people. There does seem to be in England certain centres where the physique is undergoing alteration, but whether that is due to the environment or otherwise, I do not know.

5. Is there any difference in the head formation and physique generally of the existing rural population and that of towns which have risen and become industrial during the

course of the last century?—We have no evidence; that has never been looked into.

6. MRS. BRAMWELL BOOTH. Can you tell me whether the condition of the jaws and the teeth of the people at the present day is caused on account of the large proportion of soft food in the diet of the present day?—I agree that is so; it is probably mostly a matter of diet.

7. SIR EDWARD BRABROOK. To what extent do you desire the anthropometric examination to be carried out? On the various committees I serve on which deal with this subject we have always found that the simpler your requirements were the more likely they were to be satisfactorily fulfilled, and I wanted to know what is suggested as the practical minimum of the inquiry?—As things are now all men between the ages of eighteen and fifty are liable to examination, so there is no difficulty in getting as big a sample as one may desire. I take it that five per cent. of any population is enough. That is the number from which we can get the necessary data.

8. What would be the extent of the investigation in each case? Would you be content with height and weight and chest girth, or would you desire to have a more complete examination and record?—In the ordinary course of examining recruits, height, weight and certain other measurements are taken, but that is not enough, and we propose that we should pick out certain sample districts and carry out a complete survey. That would involve about twenty measurements, which would include the sight, and certain psychological and mental tests which would be applied as well as physical tests. We intend if this scheme comes off to accept the division of the country as now marked out by the Ministry of National Service, and in these areas pick out certain other areas to be surveyed at certain times, but we do not propose to survey every man and women.

9. DR. ROUTH. It would be a great thing from an obstetric point of view if this anthropometric examination of women could be made, but I think you would find that difficult to manage?—Yes, it is difficult.

10. We have tried to get for years every pregnant woman under medical examination to get measurements, but as yet we have found it impossible?—Yes, that is so.

11. DR. CHARLES PORTER. How much is this going to add to the time which would be taken by a school medical officer?—It is going to add a great deal. We were thinking that it would take a quarter of an hour to examine each child. That is a difficulty which can be solved by the Board of Education, and it is worth serious consideration.

12. If you were picking out cases it would be different?—We do not propose to pick out cases, but to take every one. I am talking about a minute survey of particular sample areas, and not a general survey. With a general survey you could deal with about fifteen per hour, but with the more elaborate measurement it would be longer.

13. MR. J. A. HOBSON. I should like to know whether there is an accepted standard of physical fitness which would be applicable to a man irrespective of the country he was living in, and the occupation and the time. How many factors would come in for you to reach the standard of physical fitness, and would that differ in the different occupations and in different environments? How far is there an agreement upon some common standard or standards?—I do not think there is any agreement. The test of physical fitness is the capacity of the individual to carry out the task allotted to him or her in obtaining a livelihood. The essential thing we want to discover is, are physical changes taking place in the physical constitution of the people? We must take into consideration where the man lived, his surroundings, and what his work was.

14. MGR. PROV. BROWN. Is it proposed that this should be a compulsory examination for those selected groups?—Yes, without that you could not get a fair sample.

15. And the groups should be selected from all grades of society?—Yes.

16. An enforced examination?—Yes; and as long as there is the present Act there is no difficulty with regard to the men, but there remains the difficulty of access to school children and to women.

17. Then you could go down to Eton, say, and demand so many Eton boys to be examined?—Yes.

18. And therefore it would have to extend to all grades of society?—It must.

19. COLONEL BOND. What we should have to have before the examination is started is a well-considered basis. It is essential before you start your inquiry that you should have a properly balanced and considered scheme?—There is a sub-committee sitting now drafting standard instruments and standard measurements, and cutting the number of observations to be made down to the lowest limit.

20. DR. REID. Would it not be advisable, when this examination took place, that it should be done by specially appointed officers rather than the existing officers of the authorities? I think the only way in which an accurate record can be obtained would be to have experts to do the

work on instructions carefully considered?—We thought of getting over that by having all the men concerned in the survey trained at a common centre. Of course, most of them would be men who were in the service of the Ministry of National Service.

21. I mean with regard to school children?—That could be done by the Board of Education.

22. DR. MARIE STOPES. Can you give the Commission an idea as to what data you require?—There is the height, weight, colour of the hair and of the skin, the state of teeth, jaws, and the length and breadth of the head, and then, I think, the sight and hearing, and I am not sure, but I think it is also intended to include a muscle test for measuring the strength of the grip.

23. DR. SALEEBY. Are you going to take all this information at the same age?—The age, of course, would be recorded on the card and the statistician could pick the men of different ages out if he wanted to. There is one thing which I think is extremely important, probably the most important thing of all, and that is the rate of growth. The normal rate of growth in school children is perhaps the best index of the welfare of the children.

24. THE CHAIRMAN. How many examinations do you think would be required during a lifetime?—The accepted idea is a decennial survey, or perhaps there might be a twenty-years survey, but that is a matter, I think, which has not yet been determined. The accepted opinion is that it should be every ten years.

25. MGR. PROV. BROWN. Up to the adult age it would have to be fairly often?—Yes.

26. DR. MARIE STOPES. Will this data be the same as in America?—We are trying to make it the same.

27. THE CHAIRMAN. In regard to this examination, when you have the person before you, would anything be asked with regard to that person's environment?—I do not know whether the Ministry of National Service would have that data, but if so it would be important. It would also be important if we could get such data as to the quarter of the town in which the person lived, and his occupation.

28. For instance, with regard to a woman, would it not be important to know the character of the work the woman was engaged on, and also the hours of that work?—Yes, and the same with the man.

29. And particularly, I think, with regard to the women, going as they are into the industrial market much more than they have been?—I am dependent in the meantime

upon the data collected by the Medical Boards, and to make the statistics of full value we should have a record of the conditions of the man's life as far as could be obtained, hours of employment, and the work engaged on.

30. We want to make this survey of the utmost practical use, and it will not be so if we leave out such essential factors as the conditions under which the measured are living. If you want the work done properly it will be worth while having a record of the environment and everything else?—Yes, and we should like to obtain the family history as well.

31. DR. SALEEBY. Will you consider the desirability of having something like the Wassermann test taken?—I do not know; that would be a matter for the National Service, and that should present no great difficulty, as it is a reasonable test to make. One of the reasons why we are not getting on very quickly at present is because we are waiting to see what the powers of the Ministry of Health are going to be.

The following resolution was then carried unanimously: "That in the judgment of this Commission a permanent anthropometric department should be included in the forthcoming Ministry of Health."

SECOND DAY

Monday, May 27, 1918

THE BISHOP OF BIRMINGHAM in the Chair

Statement of DR. AMAND ROUTH

1. THE CHAIRMAN. I should not intrude upon the part which is expert in this statement of yours, Dr. Routh, but I wanted to ask a question with regard to what you call "camouflage" in the certificate of the cause of death?—I think it is well known, and the Registrar-General stated it quite definitely, that owing to the desire not to hurt the feelings of those recently mourning a dead child, the doctors do not plainly say it is due to syphilis if they can help it.

2. How do they cover it up?—In all sorts of ways—premature birth, or inanition, or marasmus. Generally the parent, the father, would take the certificate to the Registrar to have it registered.

3. That matter is not dealt with in any of the Bills before Parliament?—The Venereal Commission strongly recommended that there should be some secrecy in the certificate,

whether in the form of the primary certificate, or in a second certificate which should be afterwards sent in. Very often when a birth certificate is sent in which is not very definite, the Registrar-General causes a letter to be sent to the doctor asking if he can supply any further information in the matter, and that is, as far as I know, the only way of dealing with the matter now.

4. Would not the best plan be for the medical profession itself to come to some conclusion on the matter, that there should not be camouflage, or that they should ask for secrecy or something of that kind? What I feel is that it is putting the medical profession in a very unsatisfactory position, if people are to think with regard to any certificate of death that may be issued that it may be camouflaged, because that might extend to other matters?—This is a matter that very much concerns the happiness of husband and wife. It does not matter so much in illegitimate cases. If you deliberately put down that a child has died from syphilis, it upsets everything, and one knows that with treatment one can get a healthy child next time, and so one has to put down the death as occurring under some of the symptoms rather than under the actual primary cause itself.

5. But you may be landing people in a difficulty, in this way: that medical men will say, Well, now, we are going to camouflage something else, say drunkenness or other predisposing things; is it not rather dangerous?—If a man dies from alcoholism it is not necessary that that should be put down as the disease he died from. The Registrar-General might ask questions. It might be that the man died of Bright's disease or of cirrhosis of the liver.

6. Dr. Saleeby. Do you put it to the Commission that the Commission support a resolution of yours that certificates should be sent directly from the doctor to the Registrar-General?—Yes.

7. Dr. Stevenson. The proposal you put forward is that there should be two certificates, one of the fact of death, and the other a certificate of the cause of death? At the Venereal Commission I think every doctor who gave evidence dealt with this subject, and I thought there had been a recommendation by the Venereal Commission in their report.

Dr. Mary Scharlieb. It was recommended that two certificates should be given, one simply certifying the fact of death, to be given to the relatives, and the other a confidential certificate written by the medical attendant and sent straight to the Registrar.

DR. ROUTH. No legislation relating to that has been the result.

DR. STEVENSON. I think the Commission on Venereal Diseases only recommended the suggestion, which was put in by the Registrar-General, or by me in his name, to the consideration of the Government. Did it go so far as to actually recommend the change itself?

DR. SCHARLIEB. Yes, I think so.

DR. ROUTH. Cannot we recommend that that suggestion should be pushed forward again?

COLONEL BOND. Would it not be well that we should record our opinion that the whole problem of the notification of death requires such reform as will prevent the troubles of which we are complaining?

THE CHAIRMAN. Except that it is always well to make suggestions of practical action if you can, and if the medical profession are agreed I think we might pass a resolution to that effect.

MRS. BOOTH. It is considered justifiable that both parents should be deceived in regard to the deaths of their children?

DR. SALEEBY. Would any deception be involved?

MRS. BOOTH. Certainly, if one of the certificates, at any rate, camouflaged the cause of death. Ought not either parent to be able to secure the truth from the doctor if they desired it?

THE CHAIRMAN. They would always be able to get that from the Registrar if necessary.

DR. STEVENSON. The doctor would be in the same position to tell the truth to the parent as now. If he does not put the whole facts in the certificate, it is presumably because he wishes to avoid outraging the parents' feelings, and it is just in the case where he considers it impossible to tell the parents everything that he conceals it on the certificate.

DR. ROUTH. These things generally happen at the birth of a still-born child. The mother has gone through a serious crisis, and the father can generally be approached and be asked questions. He can be asked to explain things, and the mother can be dealt with accordingly, but the certificate is taken to the Registrar in a few days, and if you put syphilis in the certificate, mothers might die of the shock or become mentally affected. It has to be kept from the mother at all events until the husband chooses to say anything to her himself, because many of the husbands consider themselves cured. They have been tested before marrying, and they do not think they have anything communicable at all, but it is communicable by the seminal fluid sometimes. The

husband's doctor has certified that a man may safely marry, and knowing these facts it is better to avoid making a statement which might break up a family.

MRS. BOOTH. I do not think women should have this knowledge when it would be dangerous to their health, but I think they ought to be able to obtain knowledge of the truth if they desire.

THE CHAIRMAN. I think there ought to be exact equality between the sexes.

MRS. BOOTH. Wives are continually kept in ignorance and deceived by the doctors. The doctor covers the husband. I know many cases.

DR. STEVENSON. At present both the wives and the Registrar-General are deceived. What the Registrar-General wants is that he, at any rate, should not be deceived.

DR. ROUTH. I should like to propose that the suggestion of the Venereal Commission should be proceeded with if possible.

DR. SALEEBY. That suggestion covered all deaths, not simply deaths from venereal diseases. I should be very glad to second Dr. Routh's resolution.

DR. STEVENSON. If you have a confidential certificate only for certain cases, the thing would not work. The certificate in all cases should be a confidential document. The certificate is at the command of the public by paying one shilling, and that is what we wish to have done away with. This Commission might endorse the proposal of the Registrar and that of the Venereal Commission.

DR. SALEEBY. Dr. Stevenson has already answered Mrs. Booth, and said that the parents can still go to the doctor and ask for the truth. They might or might not get it. We are not going to have a law that a doctor is bound to tell the truth.

DR. ROUTH. No, he would simply refuse to answer the question. If a wife definitely asked me whether her child had died from syphilis, I should avoid saying "yes," especially if I thought the husband had good reason to believe he was cured. Treatment can be adopted very well and the mother can very often be cured without her knowing. And if she be treated also throughout the next pregnancy, the next child is going to be healthy.

THE CHAIRMAN. Might be.

DR. ROUTH. Almost invariably, if the mother is properly treated the next child will be healthy.

The resolution was then carried.

DR. SALEEBY. I should like to ask Dr. Routh whether he

does not think it very desirable that there should be registration of still-births?

DR. ROUTH. No doubt there should be, and that is what we are trying to get in many ways, by deputations to the Local Government Board, etc. At present still-birth are "notified" only, and come out at an average of a little over three per cent. of the total deaths.

THE CHAIRMAN. Dr. Saleeby will possibly ask for registration from the twenty-eighth week onwards.

DR. SALEEBY. Yes. I hope some one will propose a resolution that still-births be registered.

DR. ROUTH. Births are registered by the parents on the certificate of the doctor.

LADY SELBORNE. It is the business of the doctor to notify and of the parent to register. If you make it necessary only to register it falls only upon the parent. It would be rather difficult to get parents to register still-births, but is it not comparatively easy to get doctors to notify them?

DR. ROUTH. We have tried to get not only notification of still-births, but of every formed fœtus.

DR. STEVENSON. It is only in English-speaking countries that there is no confidential certificate of the cause of death, and there is no registration of still-births in this country or the Colonies. What we hope to do is to get notification done away with altogether, to get it merged into registration.

DR. ROUTH. I believe it has been found that the local notification to the Medical Officer of Health has been valuable, because many of these dead children are then taken to the mortuary and examined, and where spirochætes are found, Dr. Hope in Liverpool, and Medical Officers of Health in other places as well, have been able to have both the father and mother treated, so that the subsequent children may be healthy.

DR. STEVENSON. Any form of registration would be the function of the local authority, and in that way Dr. Hope would get immediate knowledge of the registration.

DR. ROUTH. Yes, but if it had to go to the Registrar-General and then come back in a fortnight's time valuable time would be wasted.

DR. STEVENSON. I do not know that there is any sug gestion that registration should be direct to the Registrar-General; it would be to the local sanitary authority.

LADY SELBORNE. Until the system is made perfect don't you think it would be right that all information should be put into the hands of the Registrar-General?

THE CHAIRMAN. It should come under the cognisance of the Registrar-General.

DR. PORTER. The Notification of Births Act makes that provision.

Dr. Reid moved, and Dr. Porter seconded, that all still-births should be registered after the twenty-eighth week of pregnancy. (Carried unanimously.)

8. COLONEL BOND (To Witness). You speak of the medical supervision of women, but do not detail any method by which that should be brought about, either by voluntary or compulsory action?—I think that voluntary notification of pregnancy would only come about by education, by women getting to gradually realise the great value of it. Compulsory notification is no good.

9. I would like to ask the witness, in regard to his observations on what may be called the spirochætes' life-history, how far he feels he can really say that that is now based on observation and evidence?—I don't think it is absolutely proved, but when a man like Professor Noguchi of Rockefeller Institute infects apes and rabbits by spirochætes developed in cultures from granules with definite syphilitic results it is almost certain.

10. MRS. FISHER. Many women have apparently been infected by soldiers now serving abroad. Mothers have had healthy children, and then have a baby affected with venereal disease, and I am told that that is becoming very common. I am told they do not tell the mother, and the father cannot be got at. Is not that a dangerous and difficult state of things?

DR. STEVENSON. We get something over 10,000 deaths of soldiers each year in this country, and there are hardly any of them certified as from syphilis.

DR. ROUTH. I suppose it is a fact that if a man has kidney or liver or any other disease, which may not be necessarily due to syphilis, the doctor puts down the organic disease, and omits the uncertain cause.

11. COUNCILLOR SMITH. An efficient Municipal Maternity Service would secure voluntary notification of pregnancy on the one hand, and the existence of an efficient Ante-Natal Clinic would secure early treatment on the other hand. I should like to ask if the witness agrees?—That is really what we have been trying to get.

12. LORD WILLOUGHBY DE BROKE. I want to ask Dr. Routh whether he does not think there is a great deal in Mrs. Fisher's question, as to it being impossible to get at men who are serving with their regiments abroad?—It seems

to me that there should not be much difficulty in tracing these men; they are getting letters from their wives.

13. It seems to touch upon the first resolution we came to, that in cases of this, time of death should be registered, but does it not open up quite a new consideration, that parents should be absolutely told what was the matter with the child?—I don't think we shall get anything of that sort done unless we get compulsory notification of syphilis. There is no reason why the woman and the child should not be put under treatment, and there must be ways of getting in touch with the man and having him treated too, if he is found to be diseased. In Australia anonymous notification of venereal disease is compulsory, and if the patient discontinues treatment before being cured his or her name is then notified.

CAPTAIN A. F. WRIGHT, R.A.M.C., and DR. MARY GORDON, *called and examined.*

CAPTAIN WRIGHT. I am the Bacteriologist at a large Venereal Hospital. The hospital is divided into two sections, syphilis and gonorrhœa. Those suffering from both complaints are admitted into the former section. My figures are derived from the syphilis section only, as that disease lends itself far more to accurate records than gonorrhœa, on account of its more definite chemical and bacteriological course. Syphilis, with a definite time of incubation and a definite time between the so-called primary and secondary stages, is a better disease and an easier disease to get statistics from than gonorrhœa, in which there is no definite incubation period. On entering the hospital each patient is thoroughly examined and cross-questioned by the officer in charge of the section, and he makes elaborate notes. The patient goes in and stands before the officer stripped, and he has to give details as to the time of infection and the place of infection, and of course as to whether he is married or single, and other questions of that sort. While these answers are being given, the medical officer is examining the man and casting his eye over him, and he can get a very good idea as to whether the man is setting himself out to deceive. For instance, supposing a man says, "I was with a woman three days before this came on," and he had a full syphilitic rash in the throat and glands and so on, you know at once that the man is telling lies, because the syphilis is at a stage which does not correspond with his statement. In that way syphilis differs from gonorrhœa. We have no means of proving whether the man is telling the truth, whether he says he has had it for a week or a month or six months or a year. I propose to

give you figures showing first the influence of alcohol on falling into temptation, not necessarily as a temptation, to immorality, but its effect on resistance to that temptation; and secondly, I propose to speak on the class of women affecting the troops. It has been stated by temperance advocates that drink is largely the cause of immorality. Indirectly this may or may not be so, but the evidence Captain Gibson has collected shows that it has little to do with it. Out of 886 cases only 11·7 per cent. were under the influence of drink at the time of exposure to temptation, whereas 24·45 per cent. were total abstainers. The remainder, although not abstainers, were not under the influence of drink at the time. Of course I can only speak about the troops. The total abstainer is just as reckless under temptation as the moderate or heavy drinker. The question as to what class of women is affecting the troops is, I think, of vital importance. Out of 886 cases, 3·1 per cent. were infected by their wives while home on leave. It is very difficult to get an accurate estimate of the number of men infected in this way, and of the number of infants infected. Many of the married men will say that they were infected by their wives, and that may be correct for all I know, but if the dates do not tally, or if there is any reason to suspect deception, intentional or otherwise, it is not right to consider it. There can be no doubt that a large number of women in the country are infected with diseases which cause sterility or degenerate offspring, and that they have had these diseases while their husbands were away on active service. The men are in all parts of the world, and they cannot possibly have given their wives syphilis. There again is another reason why syphilis should be taken—that the men are only home on leave for a short time. Of 886 cases, 116 or 13·1 per cent. were infected by professional prostitutes, assumed by the fact that monetary payments were made. I agree with Dr. Gordon that we have no way of saying who is a professional prostitute. The only way that we have been able to form any idea is to ask the men whether any money payment was made at the time, and in 13·1 per cent. of the cases there were money payments. On the other hand, 714, or 80·5 per cent., were infected by a class that one might term the amateur prostitute. Thus you will see, gentlemen, that it is not the prostitute who is a danger to the public. She is probably familiar with her risks and takes precautions, but these shop and servant girls who amuse themselves with the men, who fall into temptation and make sexual indulgence a habit, I cannot help thinking that it is to this type

of girl that venereal disease is frequently to be traced. I do not think we shall ever be without the professional prostitute, but I submit that alone she would not be a potent factor in spreading the disease, and that legislation should go still further to minimise the danger. When it comes to dealing with the amateur the problem is very difficult. I think that the amateur is the real menace to the country, as she takes no precautions to keep herself clean, and does not realise that, if she is infected, she may infect man after man. What will happen on demobilisation? Large bodies of men, having lived a strenuous camp life for a period, will find themselves petted and fussed up and made love to by these women, and you must realise that the physiological action of this will be to increase the sexual functions, and I do not hesitate to say that facility will be offered to them to exercise these functions. What the pathological action will be is to re-kindle any latent gonorrhœa which the men may have had in the past. I think that unless we are very careful there will be an astounding scourge of venereal disease at the end of the war, and that this should be forestalled by propaganda on a large scale, and by lectures to men and women on the dangers of venereal disease, and its prevention and cure. A great danger in the way is ignorance, and I think it is time to realise that sexual activity is a physiological process. We must start the education of the children on these matters early, and not leave them to get their information possibly from the dirty talk of older children. Then there are the enormous number of men who are infected by girls in their teens. In the hospital we have a particular term for that: we ask, "Did the girl have her hair down her back," and the answer may be "yes." Of course their actual ages we cannot get at. These girls have thought it grand to go about with a man in khaki. They regard sexual intercourse as something natural, not merely to be obtained by marriage, but as a clever accomplishment. That point is important. I am quite sure that a lot of these girls, and particularly a lot of boys, think that to have sexual intercourse is a clever accomplishment, and they will tell their companions next day that they have been very clever. There should be education as to the dangers involved, as to how these may be minimised by preventive methods, and also as to full and early treatment. I do think that the public ought to know the value of preventive methods. There is a great deal against it, but the public ought to know the value of cleanliness and other preventive methods in keeping away venereal diseases. Such methods, for instance, as the prevention of overcrowding

and the necessity of healthy outdoor exercise. Sports and outdoor exercises I think are most important. In regard to early marriages and the encouragement of child-bearing, I think the hysterical unions which have taken place during the last three years are passing fancies, and what one may call physiological mating. I do not think that sexual matters are to be regarded purely as physiological processes, or that we ought to have our lives conducted on those lines. It is necessary that all who are infected, both male and female, shall be properly treated. I do not see how it can be brought about, but it is an ideal that all those who are treated should be thoroughly treated, until it can be proved that they have been clean for a long time; they must remain under treatment, and not just have treatment until they think they are cured and then stop it altogether.

14. Dr. Reid. With regard to drink among infected men, have you any information as to the number of drinkers and abstainers and moderate drinkers in the army, because the figures you give without some such standard are quite useless?—No, I have not, but I say that given the temptation the abstainer is just as liable to fall as the others are.

15. Lady Selborne. I should like to ask Dr. Mary Gordon one question: Don't you think that the short sentences of a fortnight and three weeks and a month imposed upon girls by magistrates have a very deleterious effect?

Dr. Gordon. Most deleterious. It is impossible to do anything with them. Of course every effort is made to influence the girls for good. I don't think this meeting has any idea of the long sentences they are now getting for solicitation. They are getting immense sentences—anything from six to fifteen months. Very often while in prison the girls are able to get treatment for venereal disease. From the time the amateur begins until the time she gets into prison, is very often not a fortnight. I have known many girls who, in no longer than that, have been absolutely banned.

16. Mrs. Booth. That is because they can be called prostitutes on the evidence of the police?—Yes.

17. Mgr. Prov. Brown. The existing homes are a kind of washing-tub?

Dr. Gordon. I don't think it is always the washing-tubs. There is great difficulty in bringing these homes up to date. The washing-tub is not a dishonourable trade, and I have no doubt that in many cases it is lucrative, and that that is why they do it. You cannot put persons who are old

enough to marry and able to get their own livings into these places and crowd them together and expect any good to come of it.

MRS. BOOTH. In eighty homes for women in the Salvation Army the wash-tub is not in any of them. There is needlework for some, paper-folding for others, and gardening in one home, but the women do only the washing of the home itself. The laundries that we have are what we call "industries," to which girls who like laundry work are transferred when they leave the home to earn their own living, and they are paid at the ordinary current rates.

18. DR. ROUTH. I cannot help thinking it would be an advantage if homes of this sort were brought in. Would not one result be to reform these girls and at the same time prevent them being sent to prison?—The real difficulty in connection with the homes is to get suitable matrons, who will give the girls a sense of their responsibilities, and try to raise them up to a position fitting them for domestic service, or for laundry work, or for some other trade. I think it would be difficult to keep the girls there.

19. LADY SELBORNE. There has been evidence as to young girls who are simply amusing themselves, you may say, just like the men; they are not doing it for gain, in order to get a livelihood. It would be exceedingly difficult to get evidence in such cases?—Yes, in a small town or district every one would think twice before bringing an accusation against a girl if the girl's father was a person of some small importance there.

CAPTAIN WRIGHT. Dr. Gordon has raised a point that is scarcely realised enough—that it is not necessarily the lower class of girls who have taken up what I have called amateur prostitution. The upper classes have also done so. In the upper classes the amount of venereal disease is much more than people realise. Many of those who should be the virgins of the upper class are very badly infected with venereal disease.

COUNCILLOR SMITH. Dr. Gordon is not invited to go before the Joint Committee as representing this Commission, but only at this Commission's suggestion.

DR. ROUTH. I think it ought to be definitely stated that we have taken no definite line ourselves or expressed any considered views on these two Bills.

LADY SELBORNE. We are really only entitled to take information as to what effect the disease might have on the birth-rate.

THE CHAIRMAN. Yes. Do you agree that we suggest

to the Joint Committee that Dr. Mary Gordon should be heard by them?—Agreed.

LADY SELBORNE. It would be interesting to know, in regard to the Education Bill, what effect the payment on births has had in Australia, because of the way this Education Bill may affect the birth-rate. It may make it too expensive to have children. If the Australian evidence showed that the contribution of £5 per birth had increased the birth-rate——

DR. STEVENSON. The birth-rate in Australia has increased at a time when it is dropping all over the world.

THIRD DAY

Tuesday, June 18, 1918

THE BISHOP OF BIRMINGHAM in the Chair

Statement of MISS MAUD ROYDEN

MISS ROYDEN. I hope you will regard what I say this afternoon as embodying a very tentative sketch of the form that we should like the endowment of motherhood to take. Our idea is that the separation allowance paid to the wives of members of His Majesty's Forces for themselves and their children should be extended after the war to all mothers of young children; that this should not be administered through the Poor Law, and not by any charitable society, but should be regarded as a recognition by the State of a service to the State. We suggest, however, that one alteration should be made: No money should be paid to the wife as a wife, but as a mother. Payment should begin at a certain definite period, fixed in consultation with doctors, before the birth of the child, and it should continue until the child goes to school. We are in doubt on one point—whether every allowance should cease when the child goes to school, or whether only the mother's allowance should cease when the last child goes to school, on the score that she is then free, at least part of her time, to earn money if necessary, and that the children's allowance should continue until they leave school; but on this point we still have to work out the cost. It is very difficult to work out the cost owing to the absence of statistics with regard to the number of mothers having children under thirteen or under five. The

last census was in 1911, and the enormous changes that have taken place since then in the decline of the birth-rate make it impossible to arrive at any exact estimate of what this scheme would cost; but very roughly we estimate that if the mother's allowance stopped when the children went to school, and the children's allowances were continued until they left school, it would cost the country about £250,000,000 a year on the present birth-rate. If allowances stopped as each child went to school, the cost would be about £1,000,000 less. We have not allowed for the decline of the birth-rate since 1911, because we wanted not to err on the optimistic side, so that our estimate has this merit, that it is probably, if not certainly, over what would be the real cost. We felt with regard to the point that particularly interests this Commission, that there are a very large number of people now of all classes who both know and practise means of restricting the birth-rate. I know that you took a great deal of evidence on that at your last sitting, and I do not at the moment discuss whether these means are right or wrong. They range from complete abstinence from intercourse down to procuring abortion, and between these two extremes apparently a very large number of people know one means or another of restricting the birth-rate, and practise it. It is not only the middle classes, but the working classes also. We feel that in many cases this is not due to mere selfishness, but it is due to the fact that the parents have to consider how much they are taking away from the elder children if they are going to bring others into the world. As you know, the working woman's income does not increase with her family. A good husband gives her a very large proportion of what he gets, but if he does not get any more, he cannot give her any more, even if he had ten children, and consequently she is always concerned with the question as to how far she is doing injustice to the children she has borne already if she is going to bring more children into the world. Consequently it is not really only the undesirable people who are placed in this difficulty: it is the more careful, respectable, and intelligent of the working people. We feel that to such families—and after all the working classes are from three-fourths to four-fifths of the population—we feel that to such people the addition to the family income which would come automatically with the birth of each child would make a great difference. It would not, I think, make them reckless, but it would make it possible for people who to-day are content to have one or two children to have more. I have spoken on this subject to mothers at

Baby Centres, Infant Welfare Centres, and so on, and the idea of having a definite increase to their income with the increase to their family is to them a kind of paradise, and I think it would make a great difference to them. With regard to that element in the population from which, I suppose, nobody desires that the race should be bred, we would like to point out that among what we call the "submerged tenth" there is practically no restriction of the birth-rate now. There is a pitch of squalor and misery at which, when people reach it, no motives of foresight or economy or prudence operate at all, and these people are having babies as fast as they can already. It is physically impossible for them to have babies any faster. If they want to prevent it, the means they use are abortion, but generally speaking there is practically no restriction. Of the two extremes we do not want to breed, I imagine, from the completely idle and dissipated rich, or the idle and dissipated poor. In the case of the former, an allowance of 12*s.* 6*d.* a week would not make the smallest difference, and in the case of the latter you cannot increase the birth-rate, because it is at the maximum already. So it does seem that it is legitimate to argue that it would be among precisely those people who are now on the edge of difficulty with every child they bring into the world, the respectable poor, and also the rather hard-up middle-class, who would benefit, because, although in the case of the middle-class wife the allowance sounds ridiculously small, yet, as the wife of a journalist pointed out to me, the allowance would just pay the wages of a nurse-maid for a number of people who cannot afford now to pay for help for their children. That would make a great difference to them, and would be a great consideration. There is one other point, a very important one, the effect on the illegitimate birth-rate. On that point, those who advocate the endowment of motherhood are a good deal divided, some not wishing the illegitimate children of unmarried mothers to receive the allowance at all; but most of us advocate that they should receive the endowment. The sort of woman who is absolutely reckless in bearing children, and is promiscuous as to the fathers responsible for bringing them into the world, is very generally mentally deficient. These women would not be held, surely, to be the right guardians to be in sole control of their children. The endowments would be paid to either the mother or the guardian of the child, and in the case of gross cruelty or neglect, as to-day, when the National Society for the Prevention of Cruelty to Children interferes in the case of gross neglect of children, the child will be taken away from the mother,

and the money will be paid to, and administered by, some one else. It seems to us then, that such women as I have described—the woman who goes into the workhouse once a year to bear an illegitimate child—would not be regarded by the State as the right guardian for her children, so that she would not receive or administer the money. On the other hand, where you have a girl who is not mentally deficient, but is rather weak in character—and such girls are very often the mothers of illegitimate children—if you can only keep the mother and the child together, you supply to her an element of strength, and a motive for keeping straight, which lifts her definitely out of the mentally or morally deficient class into that of the respectable citizen. If a girl is not mentally deficient, but only of rather weak character, I know from my own experience that there is no incentive in the world that keeps her straight in the future better than the keeping with her of her own child. At present it is almost impossible to provide for that, but where it has been done it has been found to be extraordinarily successful. I am chairman of a little hostel now where we keep mothers with their first babies, and we have hardly had a single case of a girl going wrong a second time. If the child is with the mother, the affection that was not evident when the child was born generally comes into existence, and then girls who are not naturally of very strong character do get devoted to their children, and we can trust them absolutely not to go wrong again. Ours is not a Rescue Home, and there are very few rules. The girls go out to work, and are found to be trustworthy. It seems to me that if we put a mother, when she is normal, into a position in which she can keep her child with her, we shall break the vicious circle by which illegitimacy continually breeds illegitimacy. The illegitimate mother of to-day is very frequently the illegitimate child of a few years ago; if not an unmarried mother, she is very likely a prostitute. The large proportion of women on the streets who were themselves illegitimate children, is a fact that every worker on that side of life is struck with. It is not only, I think, the bad hereditary strain, because if you take these children, as we have done, and give them a chance, they do not develop, in many cases, any worse characteristics than do other people's babies. Orphans who have no homes are also recruits for the prostitution market. They may have had quite good hereditary conditions, but not had a chance after they came into the world. We believe, I repeat, that if you can give the unmarried mother the chance to keep her child with her, you would have there

the surest way of breaking the vicious circle by which the illegitimate produces the illegitimate. We also suggest that it would probably be wise to make some restriction in the case of unmarried mothers, such as that they should only receive the endowment in the case of a first or perhaps the second child, and that if the mother has more children, she must, if unmarried, produce some proof of permanent connection with the father, perhaps of actually keeping house for him, of living with him, the sort of proof that is required now to establish the position of the unmarried mother under the pensions system; and that unless she is able to produce that it would be assumed that she was living a merely promiscuous life, and therefore was not a fit guardian for her child. That is the scheme, I think, as far as it would interest the Commission.

1. THE CHAIRMAN. You have no suggestion as to the restriction of the bearing of children by defective mothers?—No.

2. Your one idea is that however many children they may have, the children will be taken from them and brought up?—Yes.

3. DR. SALEEBY. You had not gone very far before you found out that there were statistics lacking which you urgently needed?—Yes.

4. You have not discussed the question of any economical responsibility or irresponsibility of the father?—No. It seems to us that what the State would provide would be merely a subsistence rate for the children. We propose to take the separation allowances as they are now, or as they will be before the end of the war. That at present would only mean 12*s.* 6*d.* for the wife, 7*s.* for the first child, and 5*s.* for the second child. That is not more than a subsistence, and it seems to us that the home would really be a partnership, because everything beyond a bare subsistence would be provided by the father, so that the responsibility would really fall on both father and mother.

5. You would say that a more effective use of the Mental Deficiency Act would be a better solution perhaps than you have given us?—Yes.

6. And as regards the control of expenditure?—Our idea was that the assumption should be that the mother had a right to it, and that there should be some system of medical inspection such as at present goes on in the schools, which should bridge over the gap between the baby and the child of five years old. Some extension of the Infant Welfare Centres and the Clinics is wanted. There is one only at

Bradford, which actually covers the gap between the baby at the Baby Centre and the child when it goes to school and is medically inspected. If the child were well, it should be assumed that the mother was discharging the duties for which the State gave her this recognition. We feel that the woman should be perfectly free. A rich woman is perfectly free to look after her child herself, or to send it to school, or to have nurses, and we do not feel it possible to impose on the working classes conditions that are not imposed on the richer classes. The sole concern of the State, we think, should be that the children were healthy, and if the medical inspector who was finally decided to be the person to judge certified that the children were well, the mother should be assumed to have discharged her duty.

7. Won't it pull down the father's wages?—That is, of course, the great fear. But it seems to us that this is the right moment to bring in this scheme, because there has been a very considerable rise in the standard of living amongst the workers, and I think it would be exceedingly difficult to pull down the rate of wages at this time. My sympathies are very much with labour, and to me this is a very strong argument. The keenest weapon that the employer has to use against the employee in any industrial struggle is the fear of actual physical privation inflicted on wife and family. If such a scheme as the endowment of motherhood were to be effected, the wife and family of working men would be at least out of the reach of starvation. They would not be well off, because the husband's wages would have gone, but it would at least mean that the workman would be in a stronger position from which to fight his battle.

8. Maternity benefit very often works out as a publican's benefit?—I have spoken about that point very frequently with working women, and they all seem to be of opinion that if the money is given to them they could generally be trusted to keep it. Their view is that a bad husband and bad father is quite as often as in the case of a bad mother the result of bad conditions. They first go to the public-houses when the home becomes really intolerable.

9. Mrs. Booth. You would reckon that this money should be given quite irrespective of the amount of wages earned by the father?—Yes.

10. Don't you think the scheme would be met if the father were legally obliged to pay over a certain proportion of his wage to his wife?—No. In that case several things which the endowment seeks to ensure would not be ensured. One is that at present, if a man loses his job, the woman loses her

home. It seems to us extraordinarily hard that in the case of a woman who is working very hard and efficiently, her income should have no possible relation to the way in which she does her work. If she does her work quite satisfactorily, and has a stupid or unsatisfactory husband, her income disappears; it goes up and down with his; whereas we feel that if she is discharging her duty satisfactorily she ought to be in the same position as he would be.

11. Most respectable men are in some club or unemployment endowment, and when they are out of work the money seldom ceases?—There is, of course, the National Insurance, which is not very much, and a very large number of men are in no club whatever except a burial club. When you think of the proportion of working men who are in organised trade unions, it is a very small proportion of the whole.

12. The allowance to the mother would be stopped if the children were not up to the mark?—Yes.

13. Would you distinguish between ill-health that was the result of a mother's neglect, and that which might be hereditary?—The medical inspector could do that.

14. When a child earns money at fifteen, it is a great help, and often during school age they are able to bring in a little? Yes, but it is a pity that they should have to earn anything.

15. Would it not meet the case if the endowment were a grant in kind, instead of in money?—That idea had not occurred to us. I should be very pleased to discuss it with my group.

16. Mrs. Fisher. Have you discussed the question of allowance since the separation allowances have been in vogue? Has it been your experience that the wife of a soldier or a sailor, knowing that she is going to get an extra sum if she has an extra child, is more willing to have an extra child?—I do not know that I have put that actual question, but I do think that the payment of this allowance has enormously increased the desire of working women for endowment. It has made them realise the advantage of having an increased income with the increase of the family.

17. You have not worked out in any fulness what relation you expect this endowment to have to the rate of wages?—We have discussed that at great length and with a number of representatives of working-women's organisations, and we are now trying to get in touch with representatives of working-men's organisations to see what is the view of trade unions. We have submitted it to Mr. J. A. Hobson and Mr. Delisle Burns and others.

18. Lord Willoughby de Broke. You want the allowance to be irrespective of the present financial position or rank in life?—Yes. We did try very hard to work out the graduated system. People pointed out to us that what would be a very great addition in a working-class family would amount to very little in the case of people having even £400 or £500 a year. We came to the conclusion that a graduated rate was out of the question. The service rendered to the State by the mother is the same in whatever class she may be placed, and you cannot pay at this time of day unequal rates for the same work because people happen to belong to different classes. You cannot use State money in order to create inequality. Lady Selborne made an exceedingly interesting suggestion which we are now considering, that a system of voluntary insurance might accompany State endowment for those who wanted additional educational benefits, or something of that kind.

19. Who are "we"?—I have not actually been given permission to give the names.

20. Dr. Schofield. The whole scheme is a means to a certain end, the end being the children?—Yes, for some of us.

21. And if the end is not secured, the means is absolutely futile?—I tried to make it clear at the beginning that the scheme appeals to different people for different reasons.

22. The thing you are aiming at is not the birth of the child merely. Do you think that the woman serves the State sufficiently to get this pension on having a child born?—Somebody has to look after the child.

23. You feel that the whole success of this scheme entirely depends on inspection. I have in mind what is called the Elberfeld system, in which the inspection of children is from birth and probably ante-birth?—I feel that the inspection ought to be reduced to a minimum. I have been told of a house in Poplar where eleven inspectors have a family under their care. That appears to be perfectly intolerable, and I hope the Ministry of Health will reduce the number. You have probably heard of Judge Neil's scheme in the United States? He says that the assumption in the States is that the mother will treat the child properly, and action is only taken when there is evidence of neglect.

24. Dr. Chalmers. You have come across families where obviously a child suffers because of the conditions of home life: is the child to be further penalised by the grant being withdrawn from the mother?—No, the child would be taken away.

25. You said you were transferring the burden of the parent to the State?—Partly.

26. You are familiar with what was done in this country one hundred years ago, before Poor Law Reform. What was the effect then on wages?—Very bad, but the whole principle was entirely different: that was relief, this is payment for service done. Before 1834 any woman, however promiscuous in her life, simply produced the child and then the money was paid. I think that in some cases the relief was only given if she was an unmarried woman.

27. Is it not the case that a man was subsidised on marriage if his wages did not amount to a certain sum?—Only in certain parts of the country.

28. And a further allowance for every child?—In some parts.

29. In what way does your scheme differ?—It has nothing to do with the father's wages; it is given right up the scale to the mother; there is no income limit.

30. COLONEL BOND. Do the promoters of your scheme suggest that it should act in regard to the large number of children in institutions—hospitals, reformatory schools, and so on?—I think the number of such institutions would be very much smaller, because children would be kept in their homes in the majority of cases. But the money should go to the person who is doing the work—the money would go where the child was.

31. MRS. RUNCIMAN. The unmarried mother might receive money for a second child?—Unless she proved herself so grossly immoral that the child was taken away at once.

32. You do not think you would say, "The State has tried this mother, and has taken a child away"?—That might be possible. Judge Neil tells me that in a large number of cases mothers who are definitely classified as bad mothers are warned that if the neglect continued the child would ultimately be removed, and almost invariably the neglect was remedied and the child was able to be left.

33. Don't you find that many mothers do not regard having children as a service to the State? Do you think it is a mistake to have children as a natural joy?—I think that mothers should realise they are doing something that is not *purely* their own personal affair. When there was no medical inspection of children a man would often say, "Surely I can do what I like with my own." It is that kind of feeling that I think would be very largely destroyed by our scheme, and parents would see it was not *solely* their own concern when they brought children into the world.

34. You speak of mothers' and children's allowances?—Mothers' until the child is five years old, and the child's until the child left school. The child's allowance will be given to the mother on behalf of the child.

35. DR. SULLIVAN. As it is a service rendered to the State in having a child, the State has a certain claim with regard to the quality of the child. Does that give your scheme a certain right on the part of the State?—I had not thought of it in that light. You mean that there should be some certificate of health before marriage?

36. Yes, that it should be preliminary to having a claim on the State?—My feeling is that public opinion is so little ripe for such a measure that it would tend to become a dead letter.

37. SIR EDWARD BRABROOK. Your scheme does not raise the question as to how the £250,000,000 is to be provided?—No. We did try to do that, and worked out most exciting schemes, but the whole question of taxation is so very much in the air, and the war has made it so difficult to prophesy where we are going to get our money from, that we finally decided to leave it to the Chancellor of the Exchequer.

38. DR. STEVENSON. It would be almost impossible to distinguish between illnesses of the child which were the result of maternal neglect and illnesses which were not. How is the inspector to certify which is which?—With the inspection of babies up to twelve months and children up to five years, as is done at present at the Clinic in Bradford, you would have a right to expect that the medical attendant should be able to make a very good guess whether the child's condition is due to neglect or unavoidable causes. I suggest that Clinics might be provided for children up to five years of age.

39. MR. J. A. HOBSON. On the question raised as to whether the proposal would act as a subsidy to wages, do I understand your view to be that the present state of affairs would prevent it so acting, and that there being a stronger bargaining power in the working-class family to-day, the nett effect would be to still further strengthen that bargaining power, and so enable the worker to bargain more than ever before upon a basis of financial equality with what may roughly be termed the capitalist employer?—That is so.

40. Do I understand you further to argue that it would tend to raise women's wages, not merely the wages of mothers, by tending to keep working-class mothers at home?—Yes, that is so. There are women who would prefer in any case

to go out to work. One gets that type of woman in Lancashire and Yorkshire, but my own experience is that the average working woman would rather stay at home and look after her children, if she could do so and still preserve any kind of economic independence. The war has created a desire for some vestige of economic independence of married women, which they will find it exceedingly hard to forego, and we are suggesting in our scheme that a very large number of women would leave the labour market from choice if it was possible for them to have some kind of independence. We believe that the average woman prefers to make her children the first claim on her time as long as they are quite young, and we want to make it possible for her to do so.

41. Would you say that the chief object is not to stimulate the quantity of child life, but to improve the standard or character of child life by imparting reliability to the consumption power of the family?—Yes, but we do also feel that it would encourage a rather higher birth-rate among very desirable people.

42. And would you say it would assist in keeping children at home, and prevent them from entering the labour market at an early age?—While they were children the allowance would stop even for the child at the age of leaving school.

43. Having regard to the new proposals for education, it would be extremely desirable to supplement the efforts of the law by strengthening the financial position of the family?—Yes: several people have urged us very much to get on with the scheme as quickly as possible, before the hostility of the working-class mother to the Education Bill has succeeded in killing it! This is perhaps the only thing that will reconcile mothers to the Bill.

44. Ought there not to be some guarantee that mothers who receive this money are not themselves going out to work for wages?—That is a point on which the supporters of this scheme are very divided. I should like to see a development of the crèche and day nursery, because I do not think it is good for any mother to have the care of even her own children all day and night.

45. Have you gone into the question of husbands who would prefer to live in idleness on the allowance to the mothers and children?—We have taken a great deal of evidence on that point. Every one will admit that there are some such husbands; there are husbands who live on their wives both among the rich and the poor; but it does not seem very characteristic of the ordinary man. In Lancashire and

Yorkshire, at least in the weaving trade in Lancashire, women get equally high wages with men, and men there are not more inclined to live on their wives' earnings than elsewhere.

46. The income-tax paying classes are at present endowed by the State by the remission of a portion of their income tax, and in regard to the non-income-tax paying classes you propose that there should be another mode of endowment?—Yes. It was pointed out to us by Miss Llewellyn Davis that it would be impossible to have different rates for the same work, but she added that this might press very heavily on people with £300 or £400 a year. If it was found that they had to pay too much taxation, it would be better to relieve them by an abatement of taxation rather than by paying them at a different rate.

47. DR. ROUTH. You want your scheme to be for every class of society. Would not the result be that it would be limited to those who are not rich, and that the rich would not claim this 12*s.* 6*d.* or 7*s.* 6*d.*?—I suppose it might be so, but we should be very anxious indeed to establish the tradition that every mother should both have a right to it and should claim it. It seems to us that the service of the mother to the State is analogical to the service of the soldier. You cannot pay a man to risk his life, and you cannot pay a woman to risk hers. During this war the sons of millionaires have enlisted in the ranks, where all get the same pay, and we should like mothers to feel the same kind of pride in the service they are doing to the State, and that they should be so entirely free from class feeling that every mother would feel she had a right to, and would receive the money.

48. Is there such a scheme as you propose in force anywhere?—No. A Bill has been introduced of something of this kind in Australia, but it was defeated. The nearest approach to it is the Mothers' Pension Scheme in thirty-two of the United States, but that is for widows. The States make no attempt at the endowment of motherhood, but merely of necessitous widows. There is one State where they endow unmarried mothers, and in that case Judge Neil gives us to understand that it has had the sort of effect I have described. Our whole object is not to destroy family life, not to pay some one else to look after the child, but to enable the mother to do so.

49. There is the question as to the date at which the mother gets this 12*s.* 6*d.* Have you any idea as to how the fact of pregnancy can be verified?—We hope that this allowance would be almost in the nature of a bribe to the mother to register the fact.

50. Councillor Smith. You don't regard the £250,000,000 as impossible figures?—Not in the light of the war.

51. Assuming an allowance of 7*s.* 6*d.* for the first child, why only 5*s.* for the second?—Because the expenses of the household are really less in proportion.

52. I was rather under the impression that a child growing older would have increased demands to make?—You have to take the income of the family.

53. You are getting a subsidy for a specific purpose, for the maintenance of a particular child; and when the second child comes the amount would be 5*s.*, and for the third child 3*s.* 6*d.*, and ultimately nothing at all?—No: they would always go on having 3*s.* 6*d.* You must believe, on the evidence of housewives, that each additional child does not go on costing the same as the first. It really costs the mother less in proportion.

54. You urge the extension of crèches: are you aware that in Yorkshire, at any rate, a great many married mothers who have adequate incomes prefer to put their children out to crèches in order that they may themselves go into factories? —Yes, and I am also aware that not only in Yorkshire, but in other parts, people send their babies to preparatory schools at seven.

55. You do not propose to interfere with the home at all?—Housing is a vast question, of which you have not asked me here to speak.

56. If the State is to contribute £250,000,000 a year it should have something to say not only with regard to the actual physical condition of the child, but also the overcrowded state of the home and its dirty condition?—With regard to housing, you are putting pressure on the wrong end: it is generally the owner of the house or the landlord who refuses to have children in it.

57. Dr. Saleeby. If you are going to contribute anything like £250,000,000 a year you might very well ask that the house should be large and convenient enough to prevent overcrowding, that the house should be clean, and that the child should be adequately clothed, fed, and cared for?—The difficulty of getting houses for people who want to marry, let alone those who want to have children, is almost insuperable. There is no question on which the poor feel more passionate resentment than the way in which they are housed.

58. Dr. Reid. Are there not a large number of houses in which people sub-let—two families living in the same house, and people with three or four pounds a week taking in lodgers?—That does happen.

Statement of MONSIGNOR PROVOST W. F. BROWN, V.G.

MONSIGNOR BROWN. It is a very obvious proposition that restrictions upon the earning capacity of the children of the poor must increase the burden of parenthood. Factory and Workshop Acts began to do this in England in 1864, and since that date a succession of enactments have effectively destroyed the child of the poor as an economic asset, except to a very limited extent. It is not necessary to enumerate all the Acts of Parliament dealing with the employment of children, but among the earlier Acts which began the restrictions there may be cited the Workshop Regulation Act of 1867, the Factories and Workshops Act of 1878, and the Mines Act of 1887. The Act of 1891 as to women and children has also an important bearing on the question. But in addition to the Factory Acts, the Education Acts of 1870, which established the Board Schools, and of 1876, which set up universal compulsory attendance, and that of 1880, prescribing a certain standard before children could go to work, and establishing authorities to enforce attendance, still further restricted the employment of children. In 1891 the age for employment was raised still further, and in 1899 a further Act made it unlawful to employ any child under twelve so as to prevent full attendance at school, and in 1901 it was enacted that no child under twelve might be employed in a factory or workshop. The Employment of Children Act, 1903, prevents their going to work under the age of fourteen before 6 a.m. or after 9 p.m., and local authorities have power to make further regulations. The Bill before Parliament now proposes still further advances upon the existing law. If passed no child under twelve may be employed at all. No child over twelve may be employed on a school day till after school hours, or on any day before 6 a.m. or after 9 p.m. No child may be employed in any factory, workshop, mine or quarry, and the local authority will be given power to regulate the employment of any child if satisfied that the employment interferes with the child's health or education. So much for direct limitations. Besides these the Bill provides for the sweeping away of all exemptions, whole or partial, from full-time attendance at school up to the age of fourteen. Some of the Acts also affect the employment of children up to the age of sixteen, but although this affects my argument I do not lay special stress upon it. I wish to make clear that I am in full sympathy with these restrictions upon child labour, and desire that every child should have the fullest opportunity of

attending school regularly and being able to profit by the education provided there. I may mention that when I was elected to the London School Board in 1897, I began an agitation which culminated in the legislation which made it possible for education authorities to provide meals for underfed children. My purpose is to point out that by the working of an inexorable economic law restrictions upon the earning capacity of children must, in the case of the poor, and especially the poor with large families, lead to increased parental burdens. No legislator or social reformer has ever been at any pains to make sure that the benefits procured for the children have not been solely at the expense of the parent. The poor have been powerless either to prevent this legislation, or to obtain any compensation for its burdensome effects upon them, and have been driven in self-defence to restrict their families. Since 1877 knowledge of methods other than the crude method of abortion have become widely known throughout the community. It is true that this knowledge appears to have had effect, first of all upon the higher grades of society, and then upon the more skilled workers. But I do not think any one familiar with our urban population will deny that knowledge of these other methods has now reached all classes. It is very likely true that the restrictions upon child labour alone would not have led to the decline in the birth-rate which has taken place since 1880. But these restrictions, taken together with the diffusion of knowledge as to easy methods of preventing conception, have had their inevitable effect, and in my opinion will have still greater effect. It is significant that the decrease in the birth-rate roughly follows the following order. First, textile and woollen towns; second, engineering and metal-working towns; thirdly, mining districts, and fourthly, rural districts. So far I have dealt only with the effect of compulsory school attendance up to the extreme limit of fourteen, there being in existence many opportunities of whole or partial exemption under that age. Now we come to consider the probable effect of extended compulsory attendance at school above the age of fourteen. Every one knows that the Bill as drafted provided that all young persons above fourteen not in full-time attendance at an approved school up to sixteen, must be educated for not less than 320 hours per year at a continuation school up to eighteen. Local authorities were to be empowered to increase the hours of attendance beyond 320 at a later period, and to make this attendance compulsory. Certain changes have been made in the Bill whereby authori-

ties are permitted to reduce the hours of compulsory attendance to 280 a year, and are prohibited from increasing them beyond 320. The obligation to attend continuation schools is not to begin within a period of seven years from the appointed day on which it comes into force, as far as young persons between the ages of sixteen and eighteen are concerned, nor after such period for young persons attaining sixteen before the end of seven years. Therefore for practical purposes the question narrows itself down to the case of children from fourteen to sixteen. I cannot help thinking that some adjustment of the conditions of attendance at school as a result of this change will have to be made. This, however, is merely my own opinion. As the Bill was drafted, to escape half-time attendance from fourteen to eighteen a young person had to attend full time at a secondary school up to sixteen. Now that this half time has been reduced to sixteen, there is sure to be a demand for some alternative full-time attendance less than that up to sixteen. Or it may well be that many parents will try to keep their children full time to sixteen rather than be bothered with the complexities of the half-time system. However this may work out, a new restriction is to be laid upon juvenile employment. The Bill provides that continuation schools must be held between 8 a.m. and 7 p.m. That is to say, they shall not be night schools. Nor may the school be held, as far as is practicable, on any trade holiday or half-holiday. Power is given to the authority to require that the juvenile shall not be employed on a day when school is attended, not only during school time, but also during such other specified part of the day, not exceeding two hours, as the authority consider necessary for purposes of rest and recreation. It is difficult to see how these young persons attending a continuation school will be able to earn as much wages as they do now. I know the argument is that if juvenile labour is made scarcer wages must necessarily be raised, as employers will not be able to do without it. It is also asserted that improved wages will enable all grades of the community to meet any loss of children's earnings, both under and above fourteen, which may arise from the new compulsion. This may be true of the higher grades of employment requiring a special skill, but I am profoundly sceptical as to its being true for unskilled labour. I know that in many classes of employment requiring no special skill there has not been much increase of actual wages during the war. Besides, there always remains the question of the lessened spending power of money, and how far the increase in wages earned is real,

and not really nominal. It must not be forgotten that compulsory attendance at school beyond the maximum age of fourteen is a new restriction upon the employment of children. The working classes, except in certain areas, have become accustomed to their children being at school till fourteen. But they have always been able to count upon their earnings towards the family support at that age at the latest. Now up to sixteen part-time attendance will be enforced at continuation schools, and this is imposing a fresh burden upon parenthood. Opinions may differ as to the extent to which the earning capacity of children between fourteen and sixteen will be diminished by their attendance at school, and no doubt the loss of income will vary according to different industries; but it is extremely optimistic to put forward, as certain speakers do, the theory that juvenile labour will be better paid because scarcer, and that no appreciable loss of income will have to be faced by the family. Mr. Fisher advised members who were pressing for maintenance allowance for children after fourteen to wait and see what the effect would be. My own view is that the Labour members who predict the loss of wages will prove correct prophets, because re-adjustment of wages outside a few highly organised industries is generally a tedious process. Boys and girls over fourteen can no longer be treated like children. Girls especially cost much more to dress, because they will no longer wear clothes of the simple character suitable to those under fourteen. Boys also want to dress more like young men, and all this means considerable expense, to say nothing of the question of money spent on amusement, etc. It is hard enough now for poor parents to keep their children on what they earn, but if their earnings are to suffer diminution, the burden will become almost insupportable in the case of large families. That I am not speaking at random, may I quote the following words from a letter to me written by Mr. Frant Briant, L.C.C., who carries on a successful boys' club, of which Lord French is the President, in Lambeth Walk, a very poor district of South London near Lambeth Palace? His attention had been called to a resolution passed by the Catholic League of South London, pointing out the absence from the Education Bill of any provision for maintenance grants for the children of poor families suffering from loss of income by extended compulsory attendance. He writes: "I am quite in agreement with it, and obviously, apart from the immediate loss to widows and those similarly situated, it is absolutely futile to try and educate children if the home income is insufficient to allow

of proper feeding. As regards the cases where there are fathers at work, the circumstances are different. I am not yet sure as to my position as regards them. I suppose the withdrawal of so many boys and girls from the labour market will, by economical laws, result ultimately in an increase of wages for adults. It is, however, often a long while before they become actively operative. I know so many cases where women are just existing, and waiting patiently for the children to reach the age of fourteen in order to be placed in a position where something more than a bare existence is possible, that I feel sure efforts ought to be made to secure adequate income for them." May I quote another letter which appeared in the *South London Press*? "I am a war widow with six children. My husband was killed fifteen months ago. I get 31*s*. 3*d*. for myself and children, and then they are all little under thirteen years old. Now, as the money does not keep us, I have to go to work and leave them to get on as best they can. Of course, I pay for the two little ones to be minded—7*s*. a week. I work on the L. & S. W. Railway as a trucker. I have to leave my children at half-past four in the morning, and do not see them till four in the afternoon. If the pension was enough to keep them, I assure you I would never leave them, as I never had to go to work before. I only hope something will be done for us. They are increasing wages all round; why not give the widows a living pension? We have given our all to the country. Evelyn K. Brewer, 6 Cherwell St., Nine Elms." Under the new Bill this woman will have to keep her children full time at school till they are fourteen, and afterwards part time till sixteen. If certain enthusiasts had their way she would have to look forward to keeping them at school up to eighteen. Can any one wonder if parenthood, thus penalised, has come to be largely avoided by the mass of the people? If fathers and mothers, already heavily handicapped in the struggle for existence by their children, are to have these additional burdens laid upon them, is it likely that, with the knowledge of anti-conception methods which is now diffused throughout the country, they will do their part in the reproduction of the race unless some alleviation of the hardship of their lot is secured to them? I have not attempted to go into the complex question of the effects of reduced families in its biological aspect. I am merely pointing out that the increased burdens on parenthood will inevitably tend to diminish the birth-rate. Some people may regard this with equanimity, in so far as it affects the less perfect types of children. But the prevailing opinion seems to be that the

State should have its numbers, already sadly diminished by the war, replenished, both as to adult lives and potential births. People who would have called the Nine Elms widow a reckless, improvident creature before the war, because she brought so many children into the world, are now straining every nerve to see that every one of these children shall be kept in good health. Yet, strange to say, Parliament looks coldly on any practical proposals to help her to keep them at school. I have received a letter from a woman at Hollinwood, near Oldham, who writes: "Please excuse the liberty I am taking in writing to you, but I read the *Daily Dispatch* and saw your splendid consideration towards us poor parents. I am the mother of ten children, the eldest thirteen years of age, and the four youngest under four years of age, so you may know I have got my hands full. I may also say that my husband is a collier, and although he gives me nearly all he earns, I have hard work to keep things in order with the price of everything; and to think that, if the Education Bill passes, I must wait until my eight living children are fourteen or fifteen before I can reap any benefit from them, after the struggle I have had to bring them up, as, if anything should happen to my husband, that would leave me with this large family of young ones to provide for. It would mean the Union for us, I am afraid"; and she goes on to say that she was brought up as a gentleman's servant, and therefore would not be fit to go into the mills. The debate on the question of maintenance allowance took, I believe, two issues—the case of children under fourteen and of children beyond fourteen. It is a little difficult to understand the exact Parliamentary position, but as far as I can get, it seems to be that some hope was held out by some official that under Clause 38 something might be done in the matter of some help for families in the case of hardship to children below fourteen. As far as I can judge the trend of the debate, no hope was held out by the Government of anything being done in the case of any persons beyond fourteen. A good deal was made of the point that there is the Administrative Education Provisions Act of 1907, under which local authorities are empowered to give maintenance grants to scholars attending secondary schools, but I think it is made pretty plain in the course of the debate, that whatever power there might be, is limited to making maintenance grants to selected children chosen by means of scholarship examinations to go forward for extended education, and in no way does the grant under the Act of 1907 deal with the ordinary child, the child of no particular ability, whose

extended education might throw further burdens upon the family.

THE CHAIRMAN suggested, and it was agreed, to hear the next witness before cross-examining Mons. Prov. Brown.

Statement of MR. N. K. HARRISON, a member of the Amalgamated Society of Engineers

I have some suggestions here which I have drawn up for counteracting the restriction of the birth-rate in the engineering trade, but they are not official; they are purely my own. The knowledge that the birth-rate can be controlled has permeated from the upper strata of society downwards, and it seems to me that we should try to observe in our own particular class what specific factors are at work which may cause a restriction of the birth-rate, and hence the notes that I have here apply particularly to my own trade. One of the biggest factors is the fact that we have no security of tenure of employment. Let me give you a example. I am assistant foreman at a munition works. I am not doing work this afternoon; I am here. It means that the assistant foreman will be missed by the manager. The manager may come round this afternoon, and possibly something under my control has gone wrong. Because the manager is in a bad temper, or his dinner has not agreed with him, or something like that, I may be told when I go in to-morrow morning that I have a week's notice. You have there the position exactly. Before the war I might have gone in to-morrow morning, and at eleven o'clock I might have been told I was not wanted after twelve, and I could say nothing. You see, we are not in the position of Civil Servants. We have absolutely no security at all of employment, and just because of a personal whim of the foreman, or of anything going wrong in the shop, or because the manager has blown the foreman up, the foreman can turn round on the men under him, and some one has to suffer. Right the way down, there is no security of employment at all. The skilled man has the example of his own home ever before him. The skilled man can remember what his parents had to go through in order to bring him up, just in the same way as I can remember, and some of the things are not very nice to remember. If we have children of our own, we have made up our minds that we are not going to let them suffer in the same way as we have suffered, because we know, such as the middle class at any rate do not and cannot know, what we have gone through. The result is, that in preference to

having four children who would be inadequately cared for, we prefer to have two, or only one, whom we should be able to look after in the proper way. Then here is another point. The trade union rate of wages is very, very inadequate indeed. I have here the figures of trade union wages before the war and now. We do not reckon that a trade union, when it fixes a rate of wages—fixes what it may call a bare minimum on which a working-class family can live in decency. The minimum wage for a fifty-four hour week for a skilled man who could run any class of machinery, a man absolutely competent, requiring no help whatever, was £2 0*s.* 6*d.* before the war. The number of hours per week has dropped a little, and if you take the earnings for a fifty-hour week now, you find the minimum rate is £3 9*s.* 2*d.* Hence you see that the men demand overtime in order that their money may be increased. There is no trade union and no trade unionist who likes overtime to be worked. It leads to unemployment, and it simply means that the man who is working overtime is keeping some one else from doing work. The minimum rate of wages earned by engineers is not extraordinary, and the rate of wages being earned even by munition workers is not extraordinary when you remember that the sovereign is now worth about 10*s.* If you admit that, you can see that on the same basis the amount of money that an engineer should be receiving now should be £4 1*s.*, instead of which he is only receiving £3 9*s.* 2*d.* Wages have not risen in the same way as the cost of the necessaries of life. The skilled man, in the engineering trade particularly, is a thinking man, and he realises that in having more children he is playing into the hands of the employing class. He is getting, shall I say, class conscious, and he does not desire that, and you have the engineer nearly always saying that he is not going to allow his son to enter the same trade. I know whole families that are in the trade, but that does not often happen. And then he realises that education is a valuable thing, and at the present time, and before the war, many men would penalise themselves in order to give their children a good education. Further, knowledge of contraceptive measures has grown. I have been shown in shops copies of a pamphlet which I believe is pretty rare now, and the knowledge in that is valuable for everybody. I myself have been asked by young engineers who are about to marry what are the best methods, and I have referred them to the Malthusian League, and I happen to know that they have approved, or at least have adopted, the methods suggested by that particular League. That knowledge is gradually working downwards,

and is gradually becoming known by the more unskilled members of the working classes. Then, of course, there is great ignorance of venereal diseases. They are regarded as trivial. Their racial danger is certainly not understood at all. The contagious nature of these diseases is not understood, and they are regarded as of very little consequence. The person unfortunate enough to suffer from them gets sympathy, but the fact that the wife of a person who has the disease is also suffering does not count for much with the other men. These are some of the ways in which I think the birth-rate has been restricted, and why it has been restricted in my own particular trade. I have drawn up one or two suggestions for removing the disadvantage incurred by parenthood in the engineering trade. The first is, that there should be a system of contract employment, requiring, say, a month's notice on either side, or wages in lieu of notice, except by consent of both parties. I have asked skilled engineers what they thought of it, and without exception they jumped at it. It means that the continual nightmare of discharge at any hour or any week would be done away with, and that they would be able to look forward with some equanimity to the future. That, I believe, is a new idea, and I have not had any opinions from the official trade unionists on it. Then there should be a dissemination of knowledge concerning venereal diseases right into the workshop. I mentioned this in the April number of the *National Health*, and I believe that the Council for Combating Venereal Disease are taking it up and using my lines as a means of disseminating knowledge. I believe that the minimum rate of wages should be raised, and that there should be more democratic control of industry. I believe that the working man should get more out of industry. He should get more than he does now, and more in proportion to what he puts into it. Very often those who take the most interest are those who get the least out of it. I believe there should be a system of education along the lines of the Workers' Educational Society, which would provide an educational highway from the elementary school to the University for the son of any man who desired it, or who was capable of profiting by it. And, furthermore, there should be provision of better and cheaper housing. This should not be under private control, and should not be of the barrack type. It is difficult to get houses anywhere near where there are big munition works and engineering factories, and what are to be had are very often not worth having. I believe that there should be State control of industry, with the idea of

removing entirely the question of unemployment. I look at it from the point of view of my own trade. I believe if there was State control the nightmare of unemployment would be removed. Then I believe there should be a transmuting of the present civic consciousness, which inhibits parenthood because of vicious conditions, into a civic consciousness concerned with the perpetuation of a fine race and the glorification of family life. The ideal of family life which is in the heart of every worker is impossible to all under present conditions. Hence, a change of social conditions is essential to a rising and a staple birth-rate. Finally, I think there should be some consideration for the income-tax payer. There should be freedom from payment of income tax to workmen with an income of under £300 per annum and two children. You may think I have put that figure rather high; I don't; and if you ask anybody who comes under the definition of working man, he will tell you the same. In addition, there should be some State assistance to the family of four or more children. Of course, you believe that a declining birth-rate is a bad thing. I have not said anything upon that matter at all. I have my own opinion, and the men in the shops have theirs, but if you think that a declining birth-rate in the engineering trade is a bad thing, then I give you some suggestions which you may care to think about for removing that restriction in the engineering trade.

1. THE CHAIRMAN. I will ask Mgr. Brown: May I take it that a perfectly satisfactory rate of wages by which a man can bring up his family properly would be a solution which would be effective in regard to the matter of the birth-rate?—I did not read my paper with a view of making any suggestion.

2. Your paper does rather suggest that it is poverty that is the difficulty?—Yes, the main difficulty.

3. And you, Mr. Harrison, would add to that that the wages ought to be increased, and fixity of tenure ought to be secure?—Yes.

4. You, Mgr. Brown, would not like to give any opinion with regard to fixity of tenure?—Yes, I quite agree with that, but I disagree with the witness that it is a new idea.

5. I would ask you both this question: The panacea more or less that you suggest is good wages, and good general surroundings, and fixity of tenure—how is it that greater prosperity has always caused a reduction in the birth-rate, and not a growth?

MGR. PROV. BROWN. I think the truth is that the better off people become, the better off they want to become.

If you take a poor family out of, say, South London, say parts of Lambeth, with a son and daughter, and they get on a bit, they migrate to Clapham or Brixton, and set up a new standard of living, and they want to improve upon that. I am afraid that so long as the world sets a standard of sumptuary magnificence that will go on.

6. THE CHAIRMAN. On this question of education, Mr. Harrison?—I put it this way, that before the war an engineer only earned £2 a week, and he saw there were people in the city with a little better education than he had had himself who were earning, we will say, £3, and he saw that by giving his child a better education that child might be enabled to earn £3.

7. Do you mean profit-sharing when you speak about the worker having greater interests in industry?—No, I believe the worker should control industry.

8. Your main point, Mgr. Brown, is that there is not enough money for people in the working class of life to bring up a large family?—Yes, that is it. I was only asked whether this Education Bill was likely to diminish the birth-rate, and I hold that it will.

9. As wages are at present?—Yes.

10. COUNCILLOR SMITH. I understand that one of the chief causes, in your judgment, of small families is inadequate income. Would it not be better to get over that difficulty by the endowment of motherhood?

DR. SALEEBY. By the endowment of motherhood rather than by raising wages? Mr. Harrison has elsewhere said he wants wages raised in order to favour the birth-rate.

MR. HARRISON. I think there should be both, because even if you raise the wages you still have to face Miss Royden's proposition that because a woman is a mother she is entitled to a reward for her services.

11. DR. STOPES. Mr. Harrison, do your people look on it rather as a grievance that they have to adopt restrictive measures to keep the family down?—Some of them do. I have been told that they have limited their families because their money was not sufficient.

12. DR. ROUTH. I should like to ask Mons. Brown about his reference to Clause 38 in the Education Bill, and facilities for giving grants in aid of education to individual families?—If I quote Sir M. Barlow I think it will make it plain: "The answer he (the President of the Board) gave me was that there is provision made in Section 11 of the Act of 1907 for the local authorities to provide nurseries, and that under Section 38 of the principal Act the Treasury is bearing half of

that expense. I pointed out to him then that under Clause 11 of the Bill the emphasis comes, not on maintenance, but on education; in other words, that that clause invites in effect the local authority to take a single clever child of a family, and, by means of a bonus or bursary or whatever you call it, stimulate its education still further. I do not wish to say that is not a commendable thing, but the type of family I have in mind, where I think assistance will be abundantly necessary, is the family of eight or ten children, where the burden is falling very heavily on the parents to keep the home together at all just at the time when the eldest child is beginning to contribute to the expenses of the household. The President on that amendment gave me the assurance that he would, when we got to Clause 36, consider an amendment if I submitted words to him to modify Section 11 of the Act of 1907 so as to include maintenance as well as education." I misquoted the clause: it is Clause 36. I was thinking of 38, but it ought to be 36.

13. I should like to ask Mr. Harrison whether he does not think that a grant to a boy or a girl, say between fourteen and sixteen, would be useful instead of a grant to the mother? At present a boy for the gardens of fifteen years wants 20*s*. If they had a grant of 10*s*. or 12*s*. just for that year, to enable them to continue their education, it would help them over the difficulty?—Does Dr. Routh want that gift so that the boy can have a better education, or so as to make it easier for the employer to get him at a lower wage?

14. For education?—At the same time it will allow the employer to get the boy for 10*s*. instead of 20*s*.

15. He would not get the 10*s*. unless he was going on with his education?—I quite agree.

16. MR. HOBSON. Mr. Harrison, would your Society favour a scheme of contract employment under which constant strikes would be impossible?—I would not favour any system which prevents the working man withholding his labour without notice if necessary.

17. THE CHAIRMAN. I should like to ask Mr. Harrison a final question: Does he think that there is any system, whether fixity of tenure or high wages or anything else, that would prevent the ordinary thinking working man from at any rate to some extent restricting the birth-rate?—No.

18. He will do it to some extent, however prosperous he may be?—Yes.

FOURTH DAY

Friday, June 28, 1918

THE BISHOP OF BIRMINGHAM in the Chair

Statement of MRS. H. A. L. FISHER, Chairman of the National Council for the Unmarried Mother and her Child

I AM speaking of a comparatively new organisation, called the National Council for the Unmarried Mother and her Child, which is itself a child of the Council for Social Welfare. It is extremely young and infantile, but we hope it will be able to do valuable work. Statistics have been laid before the Commission, and from them it is evident that there has been a steady decrease in the number of legitimate births, and that this decrease is specially marked since the war (*i. e.* 1915 onwards). This is not so with the illegitimate births, which, if anything, are increasing, and the percentage of which, to legitimate births, is constantly increasing (*see* quinquennial figures in Table I). The figures with regard to the death-rates of infants under one year all show that the infant mortality rate is much higher—roughly, we may say, twice as high as that of legitimate infants (*see* Table II). Now the causes which produce a high death-rate among infants also produce a high damage-rate among those which survive the first year of life, consequently the population which results from a falling legitimate birth-rate and a stationary or increasing illegitimate birth-rate will tend to deteriorate in quality. Clearly the other causes which we assume to be equal are very likely not equal, *e. g.* the lowered legitimate birth-rate may mean that more care is taken of the babies that are born, and this increased care may do something to counteract the deterioration in quality of the total population, which otherwise would seem likely to result from the fact that an increasing proportion of the total birth-rate was illegitimate. The causes of the higher death-rate among illegitimate infants are more or less familiar: a greater probability of infection from venereal disease (*see* Table III); economic pressure; in a good many cases unsuccessful attempts on the part of the mother to procure miscarriage; maternal anxiety; all the heavy burden of want and trouble that the conditions surrounding the prospective mother of

an illegitimate child involve. The problem of the illegitimate child with regard to society seems to be twofold: (1) To support all influences which tend to divert as many births as possible from illegitimate to legitimate. Here we must face the whole moral and social question. The only measure at present advocated by the National Council which bears upon this aspect of the problem is that for the legitimisation of these children by subsequent marriage of the parents, possibly also the recommendations with regard to adoption. (2) To endeavour to diminish the causes which bring about this heavy infant mortality rate. The recommendations of the National Council that bear upon this are: (1) That the Law of Affiliation should be altered by offering additional facilities to expectant mothers, both to enable them to make known their condition in the proper quarters and to take paternal proceedings, and also by relieving them from all costs of any such proceedings. (2) That provision be made for enabling a magistrate, on application by an expectant mother, to summon the parties before the birth of the child, and to hear the case in camera, and where paternity is admitted to make a final order. (3) That payment of the weekly amount awarded at the discretion of the magistrate be made to run from the date of the child's birth in all cases, and power be given to the magistrate to order an *interim* allowance for a period beginning at his discretion before birth and continuing up to the age of sixteen—the weekly payment, failing enforcement of payment by fathers, shall, for necessitous mothers, be provided out of funds to be allocated for that purpose. (4) That the present limit of 5*s*. a week under an affiliation order be abolished, and the amount granted be in proportion to the circumstances of both parents. (5) That adoption, with proper legal safeguards, be instituted. (6) That the subsequent marriage of the father and mother of the child shall legitimatise the child. (7) That the status of *filius nullius* now held by an illegitimate child be abolished, and that for the purposes of the devolution of real estate and the distribution of personal estate such child should be deemed to be the legitimate child of its mother. Experience in other countries has proved that an increase of provision for unmarried mothers goes hand in hand with a decrease in illegitimacy; and, further, that an unmarried mother living in a home after the birth of her first child is less likely to have any further illegitimate children. It should be noted that not only is the death-rate amongst illegitimate infants very high, but so also is that of their mothers (*see* Dr. Hope's

Memorandum), a fact which must have some influence upon the question of the total birth-rate of the country. It is suggested by some who are in a position to speak authoritatively, that these figures, grave as they are, do not represent the whole of the truth. Mr. Parr's (N.S.P.C.C.) book on the "Baby Farmer" suggests that many infants are born alive who do not survive and possibly never get registered at all, and that the question of lying-in homes which chiefly cater for unmarried mothers needs special consideration, in view of the evidence given by him as to the destruction of infant life which takes place in them. Attempts at the best means of dealing with this whole question of illegitimacy would be very much simplified if we possessed rather more accurate data; for instance, most of us have only a very general idea as to who these illegitimate infants are, and what percentage fall into any of the following classes: (1) Children of people who are living together as man and wife, but who, either (*a*) from sheer casualness, or (*b*) from principle, or (*c*) from the existence of a living, but absent, other husband or wife (either legally separated or merely vanished) have not been legally married. The workers of the S. & S. F. A. at the beginning of the war, in some districts, discovered a surprising number of these families. In some cases the parents could not legally marry, because one or the other of them was already married, and in many others they simply had never taken the trouble or thought it worth while. In a few cases one or other definitely did not wish to, and I personally have come across cases, both in the North and South, where parents who could have married did not do so in order to avoid making distinctions between those of their children who were born before, and those who were born after marriage. (2) A further large class consists of the children who were born out of wedlock, but whose parents have subsequently married. It is clear that children of these two classes present a problem entirely different from that of the ordinary illegitimate child whose father takes no responsibility for its maintenance, and who is therefore practically entirely dependent on its mother. This is the type of mother and child, of course, with whom the National Council is primarily concerned. The conditions affecting the two first classes would not materially differ from those of the legitimate children of similar social standing. Within the official statistics all are put together. This suggests that the facts as to the death-rate of the last class are in reality even worse than they seem, high though that death-rate already

appears to be. The efforts of the National Council clearly only deal with that one aspect of the question which is the attempt to save the lives of those children who are, and will be, born out of wedlock, and will be dependent upon the mother alone. With the larger problem of prevention, I am not, in my capacity of representative of the National Council, competent to deal.

1. THE CHAIRMAN. I notice among the findings of your Committee that you mention as one of the things to be done that the responsibility of the father should be recognised. If that could be properly brought about, would it not immensely decrease the number of illegitimate births?—I should hope so.

2. I have long thought that if we are going to get any real permanent improvement that is a point to which we should direct attention. Your Society would be inclined to agree?—I think so.

3. DR. SALEEBY. We have the point dealt with in your Council's statement of policy under the heading, "Ways and Means"?—Yes; a good many of those things strike at the father.

4. THE CHAIRMAN. Your Council suggests that the limit of 5*s*. a week under an affiliation order should be altered, and the amount granted should be in proportion to the circumstances of both parents, which is extremely important. A large number of deaths of illegitimate children occur in the first five days, do they not?—That is so.

5. Has your Society ever considered there was any possibility that in the first few days, before the mother has gained a real devotion to the child, its death may be more desired by her or by her friends?—I imagine that has been the experience of those who have had much to do with those mothers.

6. That devotion and affection rather grows as the child becomes more an entity?—Yes.

7. Therefore there would be less desire to keep the child alive, if I may say so, during the first few days probably, than at any time of the child's life?—Yes; it may be so with a weakly child, for instance.

8. DR. SALEEBY. One of the things which the National Council would like to see is better statistics; isn't that so?—That is so.

9. As far as your study and the National Council's study of the question is concerned, it is really necessary to consider the whole of the laws of marriage and divorce, is it not?—If you are going to discuss births within and without

marriage, you must discuss the conditions of marriage and divorce.

10. COLONEL BOND. I feel certain that Mrs. Fisher would say that the problems of still-births among the illegitimate part of the population can only be effectively dealt with when we have efficient death certification?—That surely should be so.

11. MRS. BOOTH. Is it really established by statistics that illegitimate children are more frequently born with syphilis?—There is a paragraph to that effect in the tables of birth-rate and death-rate.

12. You say the illegitimate children are weakly from birth owing to previous overwork of the mother?—I do not say so.

13. It is your own extract from the Registrar-General. Is it your experience that the unmarried mothers have really more work than the married mothers?—It is difficult to generalise—one's own experience is so limited. The unmarried mother is apt to be economically dependent only on herself, whereas the married mother has some margin sometimes from her husband's wages.

14. But the married mothers have such hard work in their own homes?—Not always—not with the first child so much.

15. MGR. PROV. BROWN. If you string up the law against the father, don't you think the effect will be to prevent births, even legitimate births?—I don't think I am competent to give an answer to that question. It is quite clear there is a great deal to be urged all around that question.

16. Don't you think that the concealment which the mother very often in certain situations has to practise during pregnancy may have something to do with the mortality of the children?—There cannot be any doubt about that.

17. Your Council have considered, have they not, that many charitable and philanthropic associations which take the illegitimate mother and child draw the line at the first child?—That is so, I understand.

18. Would they favour a relaxation of that?—They have not expressed an opinion about it as far as I know. There is very great anxiety to obtain more accommodation for the unmarried mother and her child. We know that such accommodation is almost non-existent.

19. But where it is existent they draw the line. Associations tell you that the public would be so shocked that

they would not subscribe to the funds if they agreed to take the second illegitimate child. That is one of the reasons given me by one of the heads of an Association. Would your Association try to influence public opinion on the subject?—I think it would be a good thing to lay before the Association.

20. Have they ever considered the question of making some marriage portion to the mother of one illegitimate child so that the difficulty of getting married shall be reduced?—I have not heard it considered.

21. DR. STEVENSON. With reference to what has been said as to the badness of the official statistics, I should like to know how you would deal with such a question as this. It has been pointed out that a large proportion of premature births are due to syphilis. If you get a death returned as due to premature birth, how can you deal with it otherwise than by classing it as premature birth?—Clearly I cannot answer that question. That is a question for the medical profession.

22. Quite so, but that was one of the indictments against the official statistics?—But we did not necessarily blame the compilers of the official statistics.

23. I am not suggesting you did, but in referring to the statistics in that way, was not there rather a suggestion that they might be improved? I am asking for my own information in what way it would be possible to improve them?—I am obviously not competent to answer that.

24. Has your Association approached the Registrar-General in regard to any of these matters?—I believe they are rather anxious to do something of the kind. But the Association is very young.

25. I think it might be feasible to do something to help you, for instance, with regard to the different classes of illegitimate children—the children of people who are living as if they were married and the child of the feeble-minded where there is no father to help support at all. We, I think, could get you that distinction as regards births?—That would be very important.

26. It has long been the practice when the father wishes to associate himself with the child for him to sign the register as well as the mother, whereas in the other cases only the mother, of course, can sign. So might it not be possible to draw that distinction between illegitimate births where both parents sign and those where only one signs?—I think it would throw light on some of the questions.

27. Do you consider that the English statistics are worse than those of other countries, or is it a general indictment against official statistics?—I am not competent to answer that question.

28. May I draw your attention to what I think is a slip in the heading of Table III? Under one month you gave the infant mortality rates, and then under three months: I think that should be one to three months, and under six months should be three to six months, and under nine months six to nine months?—I think it should.

29. One other point of personal interest. Is it really the case that the quotation as to the illegitimate children being more weakly from birth owing to previous overwork of the mother is derived from the report of the Registrar-General? —No, I don't think so. I don't think I said so.

30. COUNCILLOR SMITH. Would Mrs. Fisher favour taking into municipal maternity homes the illegitimate and legitimate mothers without question?—That question is very difficult to answer: I see so well the difficulties in both ways.

31. There are a great many voluntary rescue homes and kindred institutions. Is there any reason why the municipalities should not begin to so far recognise the homes as actually to take them over and run them?—I wish they would.

32. Would it not be a very reasonable thing for this Commission to ask the Local Government Board to recognise by giving a grant to any local authority prepared to go to that length?—I should love them to.

Statement of MRS. BRAMWELL BOOTH

I speak as representing the leaders of the Salvation Army, but also with special reference to my personal experiences in connection with Salvation Army Social Work, both in this country and abroad. The Salvation Army every year is dealing with many cases of unmarried mothers. In connection with one institution, the Mothers' Hospital in London, out of a total of 1,863 births, 829 were in the institution itself, and of these 459 were illegitimate. We are dealing with these cases throughout the world in an increasing volume. Since the opening of our London maternity work in 1894 there have been 5,629 illegitimate births in our Maternity Hospital. This does not represent the total number of unmarried mothers helped in London, as many are received into our other institutions from the

various infirmaries after the birth of their children. The total number of unmarried mothers assisted in the United Kingdom would be about—roughly speaking—15,000 cases. At the present time we have over 400—average 300—unmarried mothers under our care in the various homes in this country. Their average stay is four or five months, but many remain six months. In connection with this work an Affiliation Department is conducted, and during the twenty-four years we have, in this country, paid over for the children of mothers under our care £19,611 12*s*. Last year the sum paid was £1,214 10*s*. Most of these cases of affiliation were those in which the mothers had difficulties in obtaining the father's support for the child. In the majority of cases we were able to secure the money without obtaining an Order of the Court, but while this is advantageous, it has drawbacks, especially just now, when so many men belong to His Majesty's Forces. Out of 187 cases for whom we are at present receiving money, forty-three orders only were secured in the Police Court. The question of the illegitimate child of the normal woman must be separated from that of the child of the feeble-minded woman. These mentally deficient people ought to be—and we hope under the new law will be—more adequately protected, and men who take advantage of their helpless condition ought to be severely punished. Ever since my first responsibility for Salvation Army rescue work in 1884 I have striven to help unmarried mothers, and I have realised the grave injustice from which they suffer, and believe that if this were removed, the illegitimate birth-rate might be considerably reduced. What I feel is quite as important is the reduction of the high death-rate of the illegitimate children. These unmarried mothers are not prostitutes. The fact that many of them afterwards become so does not disprove this statement. I see no reason why, from the point of view of value to the nation, there should be any difference between the value of the illegitimate child and the child born in wedlock. The best laws are those which most nearly represent the natural law; or, as I would prefer to say, the best laws are those modelled upon God's law. Those that at present relate to illegitimacy are very far from this. If we look at the condition of the majority of the illegitimate children to-day, and for the child substitute the horse, the law says with regard to the horse, that its owner shall not be allowed to starve and neglect it. And yet the father of the illegitimate child is by the law practically permitted entirely to neglect provision for his child.

The law of God requires that the support of the child—whether the mother be married or unmarried—is naturally and properly the responsibility of the father. But as the law stands at present the illegitimate child is literally nobody's child—(*filius nullius*)—not even the mother's. Notwithstanding this, the mother can be prosecuted for neglecting to provide for it, or for abandoning it, and she—and not the father—is liable to the Poor Law Guardians for maintaining it while in their hands. The father of a child born in wedlock has an absolute right to the custody of the child, however young, and even against the will of the mother. The law gives him power to take an infant from the mother's breast. I cannot ascertain exactly how the law stands on this matter with regard to illegitimate children, but in practice I know it is the same. That is, if you attempt to make the father support the child, he can, if he likes, take the child away from the mother. Including the suggestions made by Mr. Clarke Hall, we desire certain improvements in the law, and have embodied them in the Bill—The Affiliation Orders Bill of 1914. (i) The once-illegitimate-always-illegitimate of England must be done away with. The subsequent marriage of the parents ought to make the child legitimate, as in Scotland and several other countries. (ii) And again, if an illegitimate child grows up, saves money, and dies without a will, by the law the child has no relations, and neither the mother nor brothers and sisters, if there are any, have any claim. (iii) If an Affiliation Order has been made against the father of the child, and he dies, the Order is cancelled. His property is not liable for maintenance, although any debts that he may owe to tradesmen, or any charge he may have given in his property, must be paid in full out of the estate; yet his natural child may starve. If neither the natural child nor mother takes a share, at least give the natural child the same as under the Affiliation Order. At present an "attachment" of a pension of the father to meet an Affiliation Order is possible, but there is no provision for payment after his death. Example: Case of Hartington, Wilder *v.* Turner, Law Reports, 11, Chancery, page 68. The Court was administering the estate of a person who had died. In the course of proceedings, a claim was made by a woman in whose favour an Order had been made against the estate being administered for both arrears of payment of 5*s.* a week and the sum representing that amount that would be payable up to the time the child attained sixteen years of age. Mr. Justice Warrington held

that as the Acts provided that the reputed father must be brought before the Court, that was the only means by which the Order could be enforced, and therefore, if he died, however much property he might leave, the mother was deprived of maintenance for the child. We feel it should be provided that where there has been an admission of paternity, support for the child should be obtainable either by the mother or the person having charge of the child. For if the mother dies suddenly before the Order is obtained, even where paternity is acknowledged, the father is relieved of all liability. A magistrate should also in these cases have power to take a mother's dying deposition. (iv) Section 4 of the 1872 Act provides that the mother's evidence must be corroborated in some material particular. This disability ought no longer to exist, because very often it is difficult—practically impossible—for her to call corroborative evidence; *e. g.*, girl in farmhouse, seduced by employer—practically impossible for her to call corroborative evidence, as there may be no one in the house but her seducer's family. Policemen and others substantiate their charges without corroboration, and a woman should be able to do so against a man. (v) In many cases a woman is unable to work for some months before the birth of her child. It should be possible for her, within three months of the birth, to obtain an Order for maintenance by the father if she can prove she has wholly or partially lost her employment because of her condition. (vi) In the case of physically deformed or mentally defective children, the father's contribution ought to continue during the lifetime of such a child, which is absolutely unable to earn its own living. (vii) Imprisonment of the father, as at present, should not cancel arrears of payment. The question is one of difficulty, I know. My desire is that the interests of the child, whether legitimate or illegitimate, should be provided for. I contend that marriage ought not to make all the difference between responsibility and no responsibility on the part of the child's father. If under the new conditions, as woman has so largely entered the labour market, it were considered right that the wife should share responsibility for maintenance of the child, then it would be equally right that the unmarried mother should also share responsibility. (viii) In cases where the father of the illegitimate child is unknown, or cannot be found, or has become insane, or is imprisoned for life or for a long term of years, or is dead, leaving no estate, the State, the community, should act in *loco parentis*. That it should, on

proof of any of these facts, at least contribute to the support of the child as much as the father would have been liable to contribute. Proper arrangements for seeing that the child was rightly placed should be made. Here I want to establish the principle that every child must have in law a father. In the case of wealthy children the Court steps in, becomes the guardian, etc. Why should we deny to the poor, who in reality need it most, what we give to the rich? (ix) The Army Act dealing with the question of soldiers' children needs radical alteration. In the main I would endorse most of the reforms asked for in the book, *Marriage and Motherhood*. But I do not think that they sufficiently aim at strengthening the tie between mother and child. The proposal to place illegitimate children under the control and guardianship of the State is not a wise one. It seems to me this should only be in extreme cases, where the mother is unequal to the responsibility. I see great difficulty with regard to Mr. Clarke Hall's suggestions concerning illegitimate children. His suggestions mainly are: (i) All illegitimate children to be made wards of the Courts of Summary Jurisdiction. (ii) Such courts to exercise complete control over the guardianship and maintenance of the children. (iii) To give power to appoint fit persons willing to act in that behalf to watch over the interests of the wards of the Court. (iv) All children whose paternity was ascertainable to be registered in the name of the father, as well as of the mother, and both parents to have equal rights of custody. (v) Right of the alleged father to call upon the mother to prove her claim before the Court. (vi) All such cases to be heard in camera. (vii) Alleged father to have the right of appeal to Quarter Sessions, with public trial. (viii) Present limitation of payment to be increased. (ix) Where father possessed of means, provision to be made for suitable education and start in life of child. (x) In such cases, and in cases where the child is blind, crippled or otherwise unable to maintain himself, limitation of age to be extended. If all magistrates were like Mr. Clarke Hall—a man with heart and sympathy for these people—then his suggestions might be workable, but as things stand at present, I think this arrangement might work very ill. Only an average of one woman in four applies for a summons, and only one in five obtains an Order, yet it is proposed that all illegitimate children shoud be made wards of Court irrespective of the wishes of the mothers. Such a course would mean either that the mother lost all control over the child, or that there would

be a dual control or partnership between her and the State, represented by the magistrates, that could only produce ruinous consequences to the child. It is suggested that the oversight would effectually protect illegitimate children from starvation, ill-treatment and neglect, to which they are often subjected. But is not the Children Act, by its cruelty clauses, intended to prevent this? And if they are removed, will the Court undertake the maintenance? As a matter of law, a guardian is responsible and can be punished for neglecting his liability, and it would be topsy-turvy to prosecute a magistrate or a bench of magistrates for placing a child where it was neglected or ill-treated. They might be obliged to try themselves, and convict themselves or acquit themselves. The weakening of parental control by a dual guardianship, or the weakening of a mother's affection for her child in consequence, or the weakening of her responsibility for it, is not a thing to be encouraged. And, moreover, officials might be appointed to do the overlooking who are utterly unfit. Well-paid jobs might be made for friends of the magistrates. It is true that the police court missionary, the Probation Officer, and the Cruelty to Children Inspector are mentioned, but the appointment would rest with the magistrates. As to the second suggestion, if both parents have equal right of custody, it can easily be seen what friction would arise. There would be the State, the mother and the father; the child would be blessed (or perhaps cursed) with three parents, each having different views, and the game of "pull devil, pull baker," would be played in very many cases. It is submitted that if the man is ordered to pay a sufficient sum, the child could be supervised under the infant life clauses of the Children Act by the Council official, and that would be sufficient to ensure its proper treatment. That something more should be done to protect illegitimate children is quite certain, seeing that the death-rate of legitimate children under one year is 105 per thousand, and of illegitimate 203, or just double, in addition to which the neglect "that causes death in the first year of life causes increased bad health, degeneracy and criminality in later years." Under the Army Act, private soldiers can only be compelled to pay 4*d.* a day and non-commissioned officers 6*d.* a day, which is deducted from their pay. The mother is obliged to see that a copy of the Order is sent to the General Officer commanding the district in which the man is serving. This she does not know, and it is notorious that large numbers of men have escaped their liability by en-

listing. The Order should be sent to the Secretary of State for War, or any officer deputed by him for that purpose, and the Secretary should order such amounts to be deducted from the man's pay as he thinks proper, having regard to the amount ordered by the Court. The amount ought to be more than that now paid, having regard to the fact that the soldier's pay has of late years been increased by more than fifty per cent. Another disability under the Army Act of 1881, Sections 144 and 145, is that the woman must pay the soldier's railway fare to and from the Court at the hearing. This many are unable to do, as it means some pounds when the man may be stationed in the south of England and the woman may be in the north. If the soldier were called upon to give evidence, say in the case of a felony, his fare would come out of the public funds, and it is more important to provide for the well-being of a child than it is to get some one sent to prison on a soldier's evidence for a criminal offence which may not be of a serious nature. This handicap should be removed.

1. THE CHAIRMAN. You would say, then, that the responsibility of the State towards the illegitimate child is almost greater than towards the legitimate?—Yes, certainly.

2. Therefore the State should do everything possible?—Yes.

3. I suppose the difficulty of the State has largely been the question of inheritance. Have you any suggestion as to whether the inheritance should go to one legitimised after marriage?—If the parents wished. It is the same father and mother, and if they marry and the child is legitimate I should not let the inheritance interfere. Let them correct their fault as far as they can. It seems to me true repentance on the part of the parents of the illegitimate child that they should make restitution so far as they possibly can to the child.

4. I knew a good many of these cases in various classes of life when I was in London. I invariably sought to get them to marry. I found in nearly every case the marriages turned out unhappily, and were very unsatisfactory. They married in order to do one thing, but they were not truly married?—Very often marriage has been unduly pressed on this kind of people. I do not think marriage should ever be pressed.

5. DR. REID. With regard to the suggestion of abolition of the need for corroborative evidence, do you see any danger in that?—There would be a risk, of course, but I

don't think it would be an undue risk. Surely by cross-examination a certain amount of corroboration could be obtained.

6. Supposing there were two men in question?—My experience is that that is not very often the case. It is only a very small number of cases in which there is more than one man in question. If it could be proved, it certainly should tell against the woman.

7. MR. SMITH. In how many instances has it been found that the illegitimate mother has more than one child?—I have not got the figure. I could get it for you.

8. Have you any approximate idea?—Our cases have mainly been selected from the more respectable women, because we could not possibly receive all who applied to us.

9. I suppose, broadly speaking, the number of such cases would be small?—Oh yes; most of them only have one child.

10. To what extent do you think the number is small in connection with the religious influences of the Salvation Army in the homes?—Among those cases we have had our highest percentage of successes. We have had very few failures with the women when the child lives, because we keep up the connection between the mother and the child. We look after them for three years after they leave the hospital, and the proportion of successful cases at the end of the three years is over ninety-five per cent.

11. Have you any general idea of the causes of illegitimacy? Would you suggest that ignorance is the outstanding cause?—Yes; ignorance of the situation on the part of the mother especially.

12. DR. SALEEBY. Ignorance of what situation—of pregnancy?—Yes; ignorance of the consequences of immorality. Many of these servant girls—the most respectable and best of them—have been brought up in such absolute ignorance that they are definitely preyed upon by men, especially grocers' assistants. As soon as they have got themselves into a difficulty, these men get a situation in another town, and do the same thing again. We had as many as four women whose cases were spread over a number of years, and we ascertained that their children were all by the same father, a grocer's assistant, who moved from town to town. He had changed his name, and we had great difficulty, but afterwards nailed upon him the parentage of the four children by four different women.

13. You don't suggest these women were ignorant of the consequences which would follow?—Yes; they were

respectable women, and he courted them and promised them marriage.

14. If he promised marriage, that introduces a different factor from that of ignorance?—They are ignorant. They don't know how to protect themselves. It is the natural order for women to yield, and before they know where they are the harm is done. If we can only increase the responsibility of the father, men may be prevented from acting like that. The thing is done in many more cases than many people have any idea of.

15. COUNCILLOR SMITH. What do you think would be the best method to spread knowledge?—I think there ought to be instruction given to the older boys and girls in the schools.

16. By the teachers?—By somebody; I do not think the ordinary teachers would be qualified to give the instruction. I should rather suggest it might be perhaps in connection with the Ministry of Health—that the instruction should be given by a doctor, or some official. It would not be a difficult matter to have lectures in the school each year for children who are leaving school.

17. Would you agree that in what are called good homes, where there are good parents and the surroundings generally are all that could be desired, in spite of the fact that there is ignorance on these subjects, the children do not go wrong?—I think they do very often go wrong, and they would NOT if they were taught. In many good homes they are *not* taught. In many homes where they are not taught influence is not sufficient, especially with regard to young women. In the case of young men the influence of a good home perhaps does give better protection.

18. DR. SALEEBY. To young men?—To young men, because they are the aggressors, but young women are not the aggressors. The young man who is brought up morally desires to be good and doesn't aggress. He is not preyed upon. It is the innocent young girls who are made the prey.

19. COUNCILLOR SMITH. In good homes children find the father and mother respect and treat each other with deference. The children instinctively do the same—brother to sister, sister to brother. They do not run the risks which those do who come from homes where such respect is not shown?—Certainly there is a great advantage in the training given in such homes. I have no possible ground of comparison. I only know that we *have* received

many daughters from good homes—religious and desirable homes. What proportion they bear to the homes as a whole, I cannot say.

20. DR. STOPES. The married mother is in an appalling position with regard to her children. She has no rights. Is not the only solution to bring the wife into the position of the illegitimate mother with regard to rights?—It seems to me that the wife's position in wedlock is surely protected by the vows of the husband—to love, cherish and care for the wife. The married mother at present has no ownership whatever. I have heard of women of my own class not married and not mothers because they refuse to bear children of which they will not be the owners.

21. In speaking about rights of custody of the illegitimate child, do you suggest that the father should have equal right of custody?—No, I do not suggest that.

22. Who should have the ultimate custody of the child?—The unmarried mother.

23. In the case of their marrying, who should have the ultimate custody?—Marriage ought to set that matter right. If a woman chooses a man whom she considers worthy to be the father of her children, she ought to be quite happy to leave the custody of the children to that father.

24. SIR EDWARD BRABROOK. You spoke just now of the question of removing ignorance by suitable instruction. That is a very difficult question. Is it possible to convey the knowledge of good without also conveying a knowledge of evil? Should we not by such systematic instruction do more harm than good?—I think not. My opinion is that young people ought to be fully instructed. It seems to me to be necessary for them to have a knowledge of evil while they live in a world that is full of evil. That knowledge can be given them in such a way as to make them desire the good.

25. I have been roughly sketching a few figures of the illegitimate births and deaths, and it seems to me that in both respects there has been an improvement of late years. Is that consistent with your own knowledge?—In what direction?

26. The number of illegitimate births has been steadily going down, and so has the number of illegitimate deaths, not at the same rate, but still diminishing?—Yes, I should think the death-rate is not so high, possibly, as it was before, because of the laws appertaining to children. Take baby-farming. No woman may now take into her house

for payment a child without being inspected. When we first began there was no inspection of the farmed-out children. A woman might have five, six or seven infants under twelve months of age in her house and receive payment for them, and there was no inspection. Now no one can receive a child under three months old and take payment for doing so without being inspected. I think that has made a very great difference.

27. MRS. CLAY. When you were speaking of affiliation you said that a matter which required revision was that when a father was imprisoned all payments were cancelled, and that that should not be. Where would the money come from when the man was in prison and unable to earn?—I meant, of course, where there was money the payments should not be cancelled. It is very difficult to get money where there is no money. My point is that the State should take the place of the father when the latter is unable to pay.

28. It is an important question how to keep up these affiliation moneys under certain circumstances?—At present imprisonment cancels all arrears, and in cases where the man is able to pay that does not seem to be at all right.

29. Your point is that for the present maintenance of the child the State ought to be responsible while the father is not in a position to pay?—Yes.

30. THE COUNTESS OF SELBORNE. At present if the mother cannot provide for the child she has to come into the workhouse—that is the hardship.—I desire that where the father is unable to help the mother and the mother unable to earn herself, the State should step in and become guardian of the child.

31. THE CHAIRMAN. And recover from the father if ever able to do so?—Yes; in cases where the man chooses to go to prison when he can pay, I don't think the imprisonment ought to relieve him.

32. THE COUNTESS OF SELBORNE. I have found in some of the rural districts a cause of illegitimacy which has not been mentioned—a girl thinks that it is an unfair distrust of the man to wait for the marriage ceremony. That is to say, that in such districts almost every first child is born four or five months after marriage. They go into towns where that point of view is not understood, and it leads them into having illegitimate children and thinking they are perfectly safe with the man who has promised to marry them. In Hampshire no man who had seduced a woman could remain in the village if he refused to marry her;

public opinion is so strong that he would have to leave. I think you are rather rash in saying that no corroboration should be required. I am a Poor Law guardian, and I see the repentant and unrepentant, all sorts of girls, come in? —Still you accept the evidence uncorroborated of a policeman against a girl. When we say entirely without corroboration we mean to help in cases where there is no doubt. For instance, the case of the servant in a lonely farmhouse, living under the same roof as the man she accuses.

33. COLONEL BOND. Has Mrs. Booth any accurate knowledge of the proportion of domestic servants in the homes with which the Salvation Army deal?—Domestic servants are the largest proportion. I don't think that fact speaks so much against them as a class—in this sense, that the domestic servant is a homeless woman.

34. Have you any figures?—Yes; sixty or seventy per cent. are domestic servants. The servant is homeless, and directly her condition is discovered she is turned out, whereas the factory girl or barmaid generally live at home, and they are not turned out.

35. THE CHAIRMAN. Have you any statistics as to the class of places from which those servants come?—They are not all poorer class servants. We get a large number from places where there are butlers and footmen.

36. COLONEL BOND. Have the Salvation Army authorities any knowledge of the numbers among these illegitimate mothers who are not necessarily feeble-minded, as far as the law recognises them, but mothers who exhibit some signs of being irresponsible?—A large number. A very large number of border-line cases.

37. MR. CROOK. Mrs. Booth seemed to imply that the man was always the culprit. Has it ever come to the knowledge of the Salvation Army that frequently a boy of sixteen or seventeen in a house with two or three servants is led away by a female servant of an older age than himself? —I have not met with any cases of that kind.

38. I want the Commission not to assume that it is always the man who is at fault when an illegitimate child is born?—Do you mean to imply that a woman can lead a man astray?

39. Yes; I mean there are women of twenty-three or twenty-four with full knowledge of the consequences of illegitimacy who will lead young fellows of eighteen or nineteen in that direction?—Do you mean those women would deliberately desire to have a child?

40. Yes?—I think there are very few such women.

41. But there are such?—Very few in comparison with the cases of men who desire to destroy women. We ought to reckon it is the man's position to protect the woman.

42. If they are both of equal understanding I agree with you.—We might bring in a law to protect very young men against such women.

43. With reference to the suggested instruction of the children in the higher standards of the primary schools in these matters, I should think ninety-nine per cent. of the teachers of England are strongly opposed to any class instruction on this subject?—My suggestion is that the instruction should not be given in the ordinary class, but only to boys and girls who are leaving school. Give it to them at the end of the term at which they leave.

44. Councillor Smith.—Do you not think that one material help in raising the standard of morality would be to increase the age at which children were permitted to enter the factory?—No, I don't think so. My experience is that factory children are very often much more worldly-wise and able to take care of themselves than others.

45. I suggest to you that the great bulk of the children in the factories know more about these problems than their parents?—Exactly.

46. I was referring to immorality. Would Mrs. Booth deem it reasonable to regard the woman who had more than one illegitimate child as being mentally defective?—Oh, no.

47. Dr. Saleeby. Mrs. Booth is in agreement, I take it, with Mrs. Fisher, that the principle of vindictive deterrents against the mother does not diminish illegitimacy, and that methods of humane care of the mother and child tend to diminish it?—Yes, certainly.

48. Dr. Reid. Should we not clear up what might be a misunderstanding with regard to the large number from the domestic servant class who went to the homes? It might be inferred that the domestic servant class was extremely likely to go wrong. Does not this happen because they have nowhere else to go?—Yes.

Dr. Stevenson. I think I could give some information on that subject. The illegitimacy rate among domestic servants is above the average. They are a very large class.

FIFTH DAY

Monday, July 8, 1918

THE BISHOP OF BIRMINGHAM in the Chair

Statement of MR. SIDNEY WEBB

I WISH to confine my remarks to certain aspects of the present economic penalisation of parenthood, and to possible measures by which that penalisation could be mitigated or counteracted, in whole or in part.

(*a*) *The Extent and Nature of the Penalisation.*—The economic penalisation of parenthood takes place at present at many points and in different ways, each of which needs to be separately considered. I do not propose to discuss the counterbalancing attractions or advantages of parenthood. These are great; but, whatever their force, they must be counteracted, more or less, by the penalisation in their effect upon volition, and it is therefore important to consider this penalisation separately. The first and most obvious penalisation, as it is the most nearly universal, is the fact that nearly all the incomes of families fail to vary according to the number of children. Every additional child means, accordingly, more straitened means for the family. This is intensified where the means are narrow. The incomes of more than two-thirds of all the families fall below the Income Tax minimum of £131 a year—a sum manifestly insufficient, at the present and probable future level of prices, to enable even a small family to obtain the bare necessaries of healthy and civilised life. I may refer, in this connection, to Mr. Seebohm Rowntree's recent calculation of the minimum necessary wage for parents and three children, at pre-war prices, at £1 15*s.* 3*d.* per week.[1] In all these seven or eight million families, in which more than two-thirds of the nation's children have to be born, every additional baby cannot but involve still more insufficient means for the rest of the family. The economic penalisation is no less severely felt among another couple of million families, who have to live on between £131 and £200 a year; and who have higher standards of health, education and other conditions of civilisation than are yet common among the manual working wage-earners. In this class there fall the great mass of teachers, foremen, clerks, and the minor

[1] *The Human Needs of Labour*, by B. Seebohm Rowntree. Thomas Nelson & Sons, Ltd., 1918. 3*s.* net.

officials of the railway administration and of the national and municipal Civil Service, whose increasing numbers are so marked a feature of the past two or three decades. With them stand, too, the several hundred thousand small shopkeepers and small farmers. Of the million families with incomes, earned or unearned, exceeding £200 a year, who make up the rest of the community, we may leave out of consideration the 150,000 or so who have over £1000 a year, because their numbers are statistically insignificant (though they take, perhaps, a quarter of the national income); and because their circumstances are such as to make any economic penalisation through parenthood only the consequence of mistaken allocation of the means at their command. But the three-quarters of a million or more families between £200 and £1000 a year—representing the numerical majority of the professional and commercial classes—are often conscious of a real penalisation of parenthood, due chiefly to the great expense of the education and professional training of their children in adolescence. Thus the economic penalisation of parenthood is felt—and in my judgment felt as a potent cause—among possibly as many as ninety-eight families out of every hundred. The social gravity of the position is, to my mind, not merely or mainly that there results a volitional restriction of the birth-rate, but, predominantly, that any such restriction is not uniform or universal, but differential,[1] affecting least of all the thriftless and irresponsible, the reckless and the short-sighted in all grades; and (among the wage-earners no less than among the middle class) most of all, the prudent and the responsible, and those capable of foresight, and especially those who have most regard for that maintenance of the standard of life on which, as I understand the matter, Political Economy holds civilisation to depend. If we let things alone, the community now breeds fastest from its socially least desirable stocks.

(*b*) *Impossibility of Graduation of Income.*—It is not practicable, so far as I can see, under any system of private ownership of land and capital and the dependence on private profit, to avert the principal factor in this penalisation, namely, the fact that wages or salaries are fixed, and profits are earned, equally whether the number of children to be supported is great or small. The employer will inevitably make the same profit, and it seems to me, must inevitably pay the same wage or salary, in proportion to the work done, or to the social status expected, or merely to the relative

[1] Fabian Tract No. 131: *The Decline of the Birth-rate*, by Sidney Webb, 1907 (second reprint, 1913). 1*d*.

scarcity of the service, without reference to the number of children in the family of the employee. This principle must apply over the whole field of competitive industry; and it can hardly fail also to influence all analogous cases of national or municipal employment.

It is worth notice, however, that there seems to be no economic objection to the salaries of public employees being fixed, if this is thought desirable, in such a way as to expand with every additional child. This principle has, in fact, been very largely adopted on the continent for the increases of salary and war bonuses rendered necessary by the great rise in the cost of living. Many German, Austrian and Hungarian municipalities, in particular, have given these supplements to salary on scales dependent on the number of children to be supported. It has been done also in this country, in some cases of bonuses to teachers and clerks, but I do not know whether on any large scale.

Some years ago, at any rate, the regular remuneration of the Wesleyan Methodist ministry included three distinct items, namely, (*a*) the occupation of a suitable house rent free; (*b*) a fixed stipend of £200 a year; and (*c*) a sum of £10 a year for each child. It would be interesting to ascertain the present figures, and also to inquire what has been the course of the birth-rate in this class during the past forty years, in comparison, say, with that among other nonconformist ministers, whose stipends are fixed irrespective of family.

I see no objection to the remuneration of teachers, and generally the growing class of national and municipal Civil Servants, being readjusted, so far as new entrants are concerned, on a similar basis. It would, however, be necessary, in the case of teachers and municipal officials, to make the supplements for children come out of a national grant in aid, so as to avoid any temptation to a locality to be so parsimonious as to give a preference to unmarried or childless officers. This suggestion (which has been made as regards teachers by Dr. F. H. Hayward) should be considered as soon as the long-overdue revision of the Grants in Aid is undertaken.

Beyond this, I see no way of dealing with the penalisation through fixity of income, so long as we make the great mass of employment dependent on private profit-making. The nation cannot wait long enough to permit of any complete collectivism. We must therefore consider the penalisation due to the charges on income.

(*c*) *Graduation of Expenditure.*—In this connection I may note that (apart from the statistically unimportant

class of families having over £1000 a year) the community spends far too small a part of its aggregate income on the one-third of its members who are under sixteen. Statistics are lacking; but before the war I roughly estimated that, out of a national income of some £2,000,000,000, the two-thirds of us of all social grades who were over sixteen were consuming for ourselves possibly as much as £1,800,000,000, or nine-tenths of the whole, leaving only £200,000,000 or less as the total expenditure on the food, lodging, clothing, and education of the one-third who were non-adult. The thirty million persons over sixteen were consuming on an average about £60 per head per annum, and the fifteen million under sixteen only got the benefit of an average of £13 or £14 a head per annum. I lay no stress on these crude and now obsolete estimates. But if any one will work out for himself what share the children of any household have in its consumption, he will find it usually extraordinarily small; and, on the whole, rapidly lessening from the base of the social order upwards. Speaking generally, the expenditure on the welfare of the children under sixteen, like the expenditure on bread, is, proportionately to the family income, greatest among the very poorest and least among the very richest. I suggest that, somehow or other, the "bairns' part" in the allocation of incomes—or of the aggregate national income—will have to be greatly increased. Returning to our immediate subject, it may be suggested that the economic penalisation of parenthood might be mitigated in the following ways, all of which, in my opinion, have the support of economic science.

(I) *Childbirth.*—There is, first of all, the provision for childbirth. The volume published by the Women's Co-operative Guild,[1] as to the experiences of working-class mothers in childbirth, must have sent a shudder through every one who read it. The bearing of a healthy child is a social service, and it ought to be regarded as such. There should certainly be public recognition of the service, and there might well be public provision for its cost. In my judgment the conclusions of political economy are emphatically in favour of such a policy. There would be no economic objection that I can see to a system which should place at the disposal of every expectant mother, free of charge, the best available advice and treatment; suitable and sufficient food for herself, if, deeming herself to be in need, she chooses to go and consume it; the best available medical attendance and nursing in her confinement; sufficient "maternity

[1] *Maternity: Letters from Working Women*, by the Women's Co-operative Guild. George Allen & Unwin, 1915.

benefit" to ensure that she can absent herself from wage-earning employment during the necessary number of weeks before and after; and the best possible institutional accommodation that her condition may require. From the standpoint of the economist we can hardly spend too much of the nation's income in getting its citizens well born. There is no better investment of the nation's wealth. And I do not see how such gifts could, to any great extent, be perverted or abused. We know that wages do not, as a matter of fact, in eight families out of every ten, suffice to pay for any proper and civilised conditions of maternity; and the making of childbirth deliberately a public charge would no more diminish personal or marital responsibility than the provision of elementary schools has diminished parental responsibility. In fact, public education, as any one knows who is familiar with the life of the poor, has, by the rising standard which it has permitted the law to enforce, greatly and steadily increased both the actual burdens on the parents and the effective legal responsibility of the parents, in so far as children of school age are concerned.

(II) *Child Nurture.*—Whether we can, with our present strangely imperfect administrative machinery, yet go further, and effectively and safely provide for the proper feeding of every child, at any rate during its first most perilous years, may be more open to question. I may refer under this head to the Fabian Society's pamphlet of 1910, entitled *The Endowment of Motherhood*, by H. D. Harben.[1] We could at least, if we chose, safely and advantageously see that every infant was provided with a sealed bottle of pure milk, delivered daily, as a matter of course, upon the order of the Medical Officer of Health, by the municipal milk-cart. Moreover, it is already law, and needs only honest enforcement, that every child must be fed, clothed, housed, educated and generally nurtured, at least up to the commonly accepted standard; or, in the alternative, fed, clothed, housed, educated and generally nurtured at the public expense. What needs to be abandoned is the heartless and wicked device—still tacitly practised, I fear—of trying to put pressure on negligent parents by letting the children suffer. There is no economic warrant for such a device. It is dead against all political science, as I venture to think it is also against morality. It is not the way to enforce parental responsibility; it is, indeed, responsible itself for much of our failure in this respect. We ought to insist that every

[1] Fabian Tract No. 149: *The Endowment of Motherhood*, by H. D. Harben. Fabian Bookshop, 1910. 2*d*.

suffering child should be promptly given what it needs. We might then prosecute the negligent parent afterwards. And it is certain that, if the means were provided, this prescribed national minimum of child nurture would be gradually but steadily raised as public opinion ripened.

(III) *Free Schooling.*—The same argument requires that we should make education everywhere and at every grade effectively free. This is now a very vital question for the struggling middle class. How long this class will go on contentedly paying large fees for secondary and University education, which the community ought to be glad to provide for every suitable student at the public expense; how long the community will continue to be so foolish as in this way to penalise parenthood among some of its most promising stocks, it is hard to say. What seems indicated, as obvious measures in relief of the present very severe penalisation of parenthood among the classes between £200 and £1000 a year, is (*a*) a very great extension of public secondary schools and of Universities; (*b*) the general reduction of the fees for secondary and University education to a minimum, and even their complete abolition, admission being contingent only on proof of sufficient ability to profit by the higher schooling; (*c*) a great increase in scholarships covering the cost of maintenance as well as education—this involving the establishment of a scheme, not merely of local, but also of national scholarships, borne by the Exchequer, as the only way to ensure their being available in sufficient numbers for every talented child or youth, without any exceptions, even in the most backward counties. Such a scheme of national scholarships would have to include, in the later years, complete professional training, not only for the teaching profession, but also for medicine (including dentistry, midwifery and nursing), law, architecture, music, accountancy, etc. We have hitherto recruited our educated classes, and therefore all the brain-working professions, almost exclusively from the homes where the parents had incomes enabling them to give their children the necessary secondary schooling, which means only ten per cent. of the whole. This is one big cause of our relative ill-success in the present war. We have been short of brains and training. We ought now, raising the standard exacted, to draw our trained brains from the whole hundred per cent. of the population.

(IV) *A Revolution of the Income Tax.*—A special (and as I think, an amazingly stupid) penalisation of parenthood among the (approximately) two and a half million families (one-fourth of the whole) whose incomes are between £131

and £1000 a year, is caused by our Income Tax arrangements. For a whole generation we have allowed the married couple to be taxed the same as the bachelor, the parent of a family the same as the childless. This absurdity has now been mitigated, but only very partially, as regards incomes under £1000 a year, by the small allowances for children (but only up to sixteen—just when they become most expensive !), and now also for a wife. There remains the curious fact that if two persons earning incomes live together without going through the ceremony of marriage, they pay a considerably lower Income Tax than if they marry. This penalty on lawful marriage amounts to £10, £20, or even £50 a year—in some cases actually to more. If a little shopkeeper, making a profit of not more than £130 a year, employs a shopgirl at £120, he pays no Income Tax. If he marries the shopgirl, the Income Tax law, without the business being changed, insists on his paying something like £15 a year Income Tax. If two doctors earning £600 a year each are imprudent enough to marry, their joint Income Tax will suddenly be increased by anything between £50 and £100 per annum. Exact particulars will be found in the pamphlet of the Fabian Research Department entitled *A Revolution in the Income Tax*.[1] I really don't know what the bench of Bishops is about, to allow such an extraordinary penalisation of matrimony year by year to pass the House of Lords without comment. What is needed, as the Fabian Research Department has in vain pointed out to the Chancellor of the Exchequer, is a shifting of the basis of assessment from the individual person to the family household, the aggregation for taxation, on request by the persons concerned, of the incomes of all the members of the family household, and the assessment of the family income thus ascertained in some proportion to the number of persons who have to be maintained out of it. This might be done either by dividing the aggregate family income by the number of mouths, and assessing it on the scale appropriate to so many separate incomes; or, more in accordance with our precedents, by allowing as many abatements as there are members of the family. The concession would, of course, cost the Chancellor of the Exchequer nothing: by changing the basis of assessment the same required total of revenue would be obtained merely by a corresponding alteration of the nominal rate in the pound. Precedents and particulars are given in the Fabian pamphlet.

(V) *Housing*.—After childbirth and schooling, one of the

[1] *A Revolution in the Income Tax*, by the Fabian Research Department. Fabian Bookshop, 1916. 1*s*. net.

most severe and widely felt forms of penalisation of parenthood, as we at present practise it, is that of the exaction of rent for the additional housing required for additional children. I need not enlarge on the evils of overcrowding, or on the difficulties that the parents of even moderate families find in getting admitted to rooms or cottages fit to live in, or on the growing burden of rent for a growing family, which is, as we have seen, not accompanied by a growing income. A suggestion has been made which is, at first sight, attractive. The nation is now being forced to take its housing generously in hand. The Government has definitely undertaken to get built at the public expense, in England and Wales alone, during the first twelve months after Peace, no fewer than 300,000 new cottages, with extensive additions for Scotland and Ireland; and, further, to go on in the very next years doing its best, out of public funds, to make good the remainder of the accumulated shortage, which is estimated for the United Kingdom at not less than one million cottages.[1] In this connection the revolutionary suggestion has been made that we should seize the opportunity afforded by this national provision of the "Million Cottages of the Great Peace," to make it a condition, as regards all national or municipal housing, that, whilst additional rooms would be let for additional children, to the extent that their numbers required, no more rent should be charged to a family of five or six than (for the smaller accommodation) to a family of two or three. In this way, it is contended, we should remove the very severe penalisation on parenthood inflicted by the additional rent now exacted on every addition to a family. It is pointed out that we do not charge the large family more than the small one for its greater use of the public parks, for its greater calls on the District Medical Officer, for the greater services that it gets from the Medical Officer of Health, for the additional vaccination that it needs, for the increased room that it takes up in the elementary school and the increased teaching staff that it necessitates, or for the greater use that it makes of the Continuation School and the Public Library —why, then, it is asked, should we penalise parenthood by charging more rent? If all the nine million cottages and tenements occupied by the wage-earning and lower middle class were owned by the State or the local authority, or even by philanthropic landlords and charitable trusts, there

[1] *A Million New Houses after the War: a Statement on the Housing Problem as affected by the War, and some Suggestions.* The Labour Party, 33, Eccleston Square, London, S.W.1, 1917. 1*d*.

might be something to be said for this policy of making addition to the rent for the extra accommodation called by the growing family. But at present not one-eighth the working-class housing is so owned; and though t proportion will probably be doubled within the next deca (during which period, it may be confidently predicted, th will be practically no purely "commercial" or profit-seeki building of workmen's dwellings of any sort), neverthele even a decade hence, it is likely that more than half w still be privately owned. There would thus be gre inequality between the tenants of the public authori and those of the private landlord; the proposed boon wou affect only a minority of the population; it could be giv only by some sort of "favouritism"; and it might le to very injurious reactions of one or other kind. At t same time, it must not be forgotten that a great and steadi increasing development of municipal housing, to meet t very grave need caused by the almost complete breakdo of our system of relying on the speculative builder and t profit-seeking investor in cottage property—municipal housi deliberately planned so as to meet the requirements of famili of the desired size—would be, in itself, an alleviation of t handicap on parenthood created by the present shortag We need, in fact, not merely a large, but actually an enormo development of State and municipal housing. It wi indeed, scarcely be practicable to allow the present Re Restriction Act to expire until such a development has tak place. More than this we can hardly expect.

(VI) *Direct Public Endowment of Children.*—We are accor ingly forced back, for any effective and sufficiently gene alleviation of the economic penalisation of parenthood, some system of universal endowment of children duri their period of complete dependence, which is now extend to fourteen. Such a system has been proposed in the for of a continuation (and an extension to all parents) of t present separation allowances for the children of the soldie These are, it is true, not sufficient, or only barely sufficie at present prices, for adequate maintenance and nurtur

[1] Another method, suggested by Mr. Seebohm Rowntree in *T Human Needs of Labour* (1918), is a complement to the policy of fixi a legal minimum wage. If this is calculated, according to curre prices, on the basis of the necessary minimum subsistence for a fami including three children, then a grant in aid might be paid fr national funds (like Old Age Pensions, through the Post Office) for t million and a half children in excess of three in a family, at a to cost, assuming the allowance to be £5 per annum per child, of abo £8,000,000.

The charge upon the Exchequer of such a national endowment of children would be formidable; but it is a mistake to assert that the increase of charge would be an increase of national expenditure. There would be no increase in national expenditure except in so far as the change involved a more adequate provision for the nation's children than is at present made. This more adequate provision is exactly what we are seeking. To this extent the increase in expenditure would be an economically desirable, and wisely thrifty reallocation of the national income—an increase of the "bairns' part" that is economically called for. Such a policy has much to recommend it. There is, I suggest, no economic reason why such a national endowment of children should lead to any lowering of the rates of wages; and I should not expect it to do so. Fewer mothers of young families, not more of them, would go out to work; and there seems no ground for assuming that the unmarried man or woman (who would be, as they are now, the workers with the lowest necessary cost of living) would accept, or could be required to accept, any lower rates than at present merely because their colleagues who were parents were receiving a subvention in aid of the children. It is, indeed, nowadays seldom a case of an individually fixed wage. We may assume that law and public opinion, if not also trade union action, would continue to ensure that wages would be governed by common rules and standard rates. The change would certainly not cause the Trade Boards and the Wages Boards under the Corn Production Act, who are legally fixing the minimum rates for some two millions of the lowest paid wage-earners (or one-sixth of the whole), and will presently be doing the same for at least a million more, to lower their legal minima merely because such of the wage-earners as were parents, and these only, were getting State aid. Quite certainly the Boards under the Coal Mines (Minimum Wage) Act, who now fix legal minimum rates for another million, would not do so. Nor would the scales of pay of the 600,000 railway workers be affected, nor those of the million people who, before the war, were directly in State or municipal employment. Thus, the wages of between five and six million persons would certainly be unaffected, and these would constitute two-fifths of the whole. The trade unions would look after the rates for half as many more. The economist would predict that the national endowment of children, by allowances for children up to fourteen, would result in (*a*) practically no change in wage-rates; (*b*) a great increase in the total expenditure on the children's welfare; (*c*) and,

as a consequence, an advance of health and strength and mental vigour in the rising generation and a fall in the child death-rate—this meaning an extremely profitable investment of the nation's capital; and (*d*), incidentally, a progressive increase in the birth-rate among all the more prudent, the more thoughtful and the more thrifty. Whether the rich and the present governing classes will, within our own generation, and before irrevocable harm is done to the race, consent to such a diversion of more of the nation's income from private to public channels—even for the sake of such a gain to national well-being—may be open to question. But what has happened to the birth-rate in the past forty years is nothing less than the coming in of a momentous new factor in racial evolution. "Time," said Bacon, "is the great innovator"; and if time changes things for the worse, and we do not make the alterations in the social environment that are necessary to meet the new factor—the social environment being created by human action, and within our deliberate control—to use Bacon's words, "What shall be the end?"

1. Dr Saleeby. What are your views as to the responsibility of the father?—I take it you mean by responsibility the liability to be called to account. The father is at present liable to be called to account only if he allows his child to sink below what is a very low minimum indeed. He practically is not liable for ordinary neglect. The child has to be so gravely suffering as to induce the Society for the Prevention of Cruelty to Children to intervene and the magistrates to convict; but there is, of course, a vast amount of neglect which is not so grave as that. If additional aid were given for the proper nurture of children, you would be able to raise the standard that the magistrates could enforce to such an extent that you would increase and not diminish the parental responsibility for the child's well-being.

2. Mr. Crook. You made a suggestion with regard to housing?—I do not think the suggestion that I quoted can be carried out unless you put all the housing into public hands. If all working-class dwellings were in the hands of the public authorities, we could fix rents at a uniform rate, however large the family, but I cannot contemplate within the near future that all houses will be in public hands.

3. Do you think that the endowment of children would tempt local authorities to drop their regulations that all women teachers should be unmarried?—I suggest that the question of the desirability of employing women teachers

turns on more than the point as to the maintenance of the children : there is a certain diversion of interest.

4. Dr. Routh. How do you propose that University education should be made free?—It has been done in Scotland by Mr. Carnegie. It would be perfectly easy to do the same in England, so far as fees are concerned, but even then University education would still only be obtainable by the children of parents who could afford to keep them during the years they were at the University, and we should, therefore, still be confining our educated class to ten or fifteen per cent. The only way to make Universities really free would be to multiply greatly the maintenance scholarships. The proportion of children who obtain any education beyond the elementary school is at present deplorably tiny, and the proportion obtaining University education is a positive disgrace to the country. We have no evidence that there is any smaller proportion of children in one class than in another who are capable of benefiting by University education. Potential poets may be born among dock labourers, just as in any other class.

5. You want it so that any child can go to a University? —Subject to the child being found sufficiently able to profit by the instruction.

6. Dr. Chalmers. You referred to the Carnegie Trust?— Mr. Carnegie merely abolished the fees, but that is the wrong way to proceed, unless you couple with it a sufficient supply of maintenance scholarships.

7. In endeavouring to remove penalisation of maternity, you require to endow scholarships and to give maintenance grants as well?—Yes, the whole expense will need to be covered. The amount of the Rhodes' scholarships was fixed with this view, but I believe there are only sixty or seventy of these scholars at Oxford at one time.

8. Is there any evidence in any other class than dock labourers of potential poets?—I do not think there is anything that can be considered evidence of more frequent occurrence of genius in one class than in another. Both talent and genius seem to be pretty well distributed throughout the whole community, from what we know of heredity.

9. You implied that the falling birth-rate is entirely volitional and optional?—No, I did not mean to say that. Volitional restriction is a very real and a very big factor.

10. You would take Birmingham as illustrating what has been happening in the last quarter of a century?—I should say so.

11. When you say parents have been penalised, how would

you compare the economic provision of the worker at the beginning and the end of the last century?—I quite agree that the workers have been very much better off in the latter period, but I do not think that this is quite relevant. First of all, a hundred years ago I think we may say that volitional restriction was not in force, for reasons which we may assume. You have the factor of new knowledge coming in. There has been, for three-quarters of a century, an improvement in the economic conditions, and yet there has been, for forty years, a fall in the birth-rate, so that the effect of the new factor must have been very considerable. The new factor has been much more influential among artisans and the better-off wage-earners than among the class of irregular dock labourers, who are much worse off.

12. You referred to maternity grants and benefits. Do you think there has been any advantage from the maternity benefit?—I was totally opposed to the National Insurance Act, but it would be wrong to say that no benefit has arisen from it, and I venture to think that the provision of the maternity benefit is the very best part of the Act. Nevertheless, I feel that if we were going to spend millions of pounds on maternity, we could hardly have spent them more carelessly than by throwing thirty shillings or three pounds at every mother's head without making any further arrangements.

13. You think this benefit would not influence wages at all?—I feel sure that it would not lower wages. I am not prepared to say whether it would actually raise wages. It is quite arguable that it would lead to a rise in wages by producing a rise in the standard of comfort. No one can foresee what the consequences may be in that direction.

14. Would you penalise an employer who would prefer to employ unmarried people?—Do you suggest that he would be allowed to give them lower wages? I postulated standard rates of wages. I do not think that anything else has ever been suggested by trade unions or by economists. The proposition would be regarded as insane that an employer should be allowed to pay varying wages for the same work in the same factory.

15. Is there anything substantially different between this system of endowed maternity and the grants given last century in subsidy of wages?—I think there is. Let me first say that the extent of the evil effect of the latter has been commonly exaggerated. It scarcely prevailed except south of a line from the Severn to the Wash. Then we must remember that the Poor Law grants in aid of wages were

given promiscuously to all and sundry, whether they worked or not, in such a way as to make up any deficit, and the result was that they did lower the current rates of wages. What is here suggested is not a grant to a labourer as such, but a supplementary allowance irrespective of his wages, and not from the employer, but from the community in some way. Wages depend in the last resort on the worth to the employer of what is called the marginal man, and that will not be either greater or less because the community pays the whole or part of the cost of the children. Therefore the employer will be able to pay the same rate of wages as he paid before the allowance, and he would be compelled to do so.

16. Your argument is that the State should pay, and not the industry?—Yes.

17. COLONEL BOND. One of the incidental results of the endowment of children would be to reveal in what sections of the community real mental ability lay, and the knowledge so obtained would eventually be of great importance to the community?—I think it would.

18. MRS. JOHN CLAY. What of those who are not even potential poets? Would they become marginal men?—I don't think they would be any worse off than they are now, whoever they are.

19. You state this would not be an expense to the nation, but an adjustment of the national income. Will there not be some with incomes of, say, over £2000 which will drop down and others which will go up?—I think the plan might have a certain effect of that kind. Some of the least able members of the upper classes will presently find themselves competing on more equal terms with the sons of other classes.

20. MRS. RUNCIMAN. In your scholarship and maintenance allowances to Universities you would, by raising the standard, tend to exclude those who are at present attending Universities and are not doing much good?—I should like to go to that length; but we need not assume that we are very quickly going to arrive at a state of society in which wealth will have no privileges at all. So long as private wealth exists I do not see why the stupid boy should not get educational advantages if his parents completely pay for them.

21. You propose a general endowment of children in such things as education; you propose a cash endowment for every child?—Yes, I put this forward as a tentative suggestion as the only way of counteracting the restriction of

births. I do not suggest that it can immediately be put into an Act of Parliament.

22. Do you think it would have the effect of increasing the quantity of children, or of simply raising the quality of the children?—Both. I believe it would enable the fulfilment of their responsibility by the parents, and would counteract the prudential restraint of the parents. I believe parents would in many cases like to have more children.

23. LADY WILLOUGHBY DE BROKE. Is your proposal for the endowment of children of the rich as well as of poor parents?—I have not gone into any practical details. All I have suggested, as a rough expedient, was the continuation of the present Army separation allowances for children, and that would not necessarily mean a universal grant for the children of the rich. When we do this thing, we shall probably begin it as we did our Old Age Pensions, only for those who seem to need it.

24. MGR. PROV. BROWN. Is it a fact that a great many scholars holding scholarships fall out because their parents cannot support them?—Yes, in spite of the fact that County Councils give a maintenance allowance. These allowances are insufficient in many cases, and many promising children drop out.

25. Quite a number of children from secondary schools have had to take immediate employment, rather than go on with their education to some better end?—They have been given something which is the beginning of education, but are unable to go on, because of the economic conditions of their homes.

26. COUNCILLOR SMITH. What form do you expect the endowment of motherhood will take?—I think in all probability the time is ripe for drastic amendments of the Insurance Act, one of which will be that the maternity benefit will be largely increased, and rearranged so as to cover the whole of the first year of the infant's life. There should not only be a grant for the requirements of childbirth, but also, at any rate, free milk for the first year. I predict that there will be amendments of the Insurance Act which will enlarge its sphere in this respect, and also the persons to which the benefit applies, so as to make things very much as they are now with regard to tuberculosis.

27. Would not a uniform allowance in the meantime be practicable?—The figure would be so enormous that the Chancellor of the Exchequer might look askance at it as a direct charge on the Budget.

28. Could there not be a uniform application of some

provision which would be a recognition of the principle, and which could be extended as experience came?—That is what I should be in favour of. There would, of course, have to be many administrative conditions; there would need to be proof, not only that the child was alive, but also that it was being properly cared for. There would need to be some sort of requirement as to its being well born. It would not be prudent to throw the endowment at the head of every mother without safeguards. In all these ways we should actually increase parental responsibility very much.

29. DR. SALEEBY. Will you give us some definite statement as to these safeguards?—It is much too important a question for me to extemporise upon. It is not that I could not suggest a number of safeguards, but you do not want to create reaction in the public mind. You cannot do anything of this kind without suitable inspection, and it is important to avoid any imputation of bureaucracy.

30. I did not mean anything extemporised; I meant something written and added to your evidence?—I will consider that.

31. DR. REID. In reference to the housing question, have you considered the feasibility of placing obligations upon manufacturers to look upon housing as part of their business machinery?—I see great difficulty in doing anything on that line, because it would encourage the manufacturer to have unmarried people, or people with small families. If a manufacturer opens a mine, or puts up a factory in a deserted district, it is only reasonable that he should make some provision for housing, but if he sets up a factory in an already well-populated district, it is extremely difficult to put on him the obligation of providing new dwellings.

32. In the case of the introduction of a large manufactory into a town where there is overcrowding, should not the manufacturer show, before he starts business, that he can house his people?—I think he should show that they can be accommodated somewhere. I think the Medical Officer of Health might regard it as being within his function, when he hears a new factory is being erected for 10,000 employees, to go to the Public Health Committee and get the Town Council to take action.

33. In that case would you have standard houses for men with a stated number in family?—I am afraid I am not sympathetic to the placing upon manufacturers of the obligation to provide houses. I really think that is a matter for the Town Councils, as the housing authorities.

34. Dr. Garvie. Would it not be possible, in view of the housing situation, for municipalities to give preference to families with children?—It is an extremely difficult thing to do. Whatever resolution you start with, you cannot help, in the case of two applicants, giving preference to the one who would be the better tenant. You could not expect the officers of your municipality habitually to take what would be the worse tenant, in preference to the better one.

35. Miss Michelmore. Would not the machinery of the new Ministry of Health be valuable in administering the benefit?—Certainly, I think it should be done through the Ministry of Health and the local health authority.

36. The Chairman. Do you think that the increase of comfort and prosperity in families is going to increase the birth-rate?—I consider that the influence will be a mixed one. I should expect that when we have increased the comfort and prosperity, and especially the regularity of life, among the dock labourers of London and Liverpool, we shall actually decrease the present birth-rate among them. Equally, I should expect that if we increase the means of bringing up children properly, and without burdening the family too much, we shall increase the birth-rate in the classes above the level of the dock labourers. If you give a man who has had £3 a week £4, as a mere increase of wages, it may be that the addition will not cause him to increase his family, but if you give the additional sum only when the baby is born, together with other opportunities contingent on an increase in family, I think the parents will be more likely to increase the family than they would be otherwise. I do not suggest that it will be necessary to pay every penny of cost incurred in respect of the child from first to last in order to get the children born. I think that comparatively partial provision for the child will have the desired result.

37. Dr. Chalmers. Are you suggesting that the subsidy should not be to the individual family, but in the form of education?—I would begin with education, but I do not think that that will be adequate to counteract the restriction. I do not think we shall be able to cope with this new factor in the birth-rate unless we come to something like public provision for the maintenance of the children as a direct gift to the family.

38. The Chairman. With regard to education, I suppose you recommend that experts should decide whether a child had reached a level when its education might be gone

on with?—Yes, I think you might trust to the selective influences of successive examinations of a sensible kind.

39. Is it not a fact that some people develop very early, and some of the very best develop quite late?—Yes, and therefore in our London scholarship scheme we made special provision for what we called the "late bloomers."

40. Supposing the birth-rate question was not involved at all, you would still advocate your scheme?—I should certainly still advocate the educational part of my scheme. We want more brains and more training. I do not think I should advocate the endowment of motherhood unless we wanted more children.

41. Is there any danger of our getting a dead level of capacity without much individuality or imagination?—If you give all young people the opportunity of pursuing their education, you will get much more variation and development than at present prevails.

Statement of Judge Henry Neil

My first experience was going into the Children's Court in Chicago and seeing what was happening, and then going to the legislature with a specific case. I did not go with any philosophy in social conditions generally, but with the condition of a particular woman and her children, and I found that the legislature could understand that, whereas if you went to them with thoughts on social economics and difficulties and safeguards, and dissected the matter in that way first, you simply startled them and got nothing done. We have learned a great many things, and one of the most important is this: Take a group of, say, a thousand families, where there were no fathers around at all, just the mothers and the children. If the mother was given sufficient to relieve her from the economic stress of earning money, so that she could give all her efforts and time and thought to the care of her children, then there was no trouble about parental responsibility at all. It was the mother's instinct to care for her children, and to overcome all the things that were commonly called lack of parental responsibility. Now take another group of, say, a thousand of the poor working-class people, with the average number of children, which we found by our pension system to be three and a third. Where a man was getting insufficient wages to maintain a family in reasonably comfortable conditions, we found that the children were not so well cared for as they were in the case

where the mother was getting a sufficient allowance. The responsibility of the father, as far as the children's welfare is concerned, is the amount of money he brings in, and if he does not bring in sufficient, his responsibility in the proper care of the children must be very little. If he cannot provide a reasonably decent and sanitary home because he does not earn sufficient wage, then the children are not well cared for, because the mother has more than she can do. When relieved of that economic stress she does more, because her time and energy are given to the children, and then you do not need safeguards. We found that we were simply paying for inspectors and safeguards money which should have gone to the mother. The endowment of mothers, or mothers' pensions, works out in this way: society generally will let you go on with the pensioning of mothers as long as you do not touch the profit system, but when you touch the profit system then they call a halt. It is quite easy to get the legislatures of civilised nations to give a pension to a mother with a large number of children when there is no man about at all, but if there is a man about, and it is any way possible for him to produce profits, then the needs of the mother and the children are used as pressure upon him to produce those profits. That pressure is used to a tremendous degree. Here is an instance: In America, in one State, a woman had six children. It was a desertion case, and under the law in that State at that time a deserted woman could be given a pension. The regular organised charities of that State went to the legislature and had the law changed, so that a deserted woman could not get a pension. The authorities were asked to send off to another State to bring the husband back and compel him to live with his wife and family. The man at the time of his marriage was a fairly good workman, but after he had become the father of six children he contracted syphilis, and the mother wanted to protect herself and her children, and would not have him about, and so he left. It was called a case of desertion, but she could not get her pension, because it was contended that if he had been there he would have been able to work to produce money to support his wife and family. That is one of the extreme cases of penalising a mother and her children in order to force the man to support them. It is sometimes forced to such an extreme degree that it reacts on humanity and produces abnormal and epileptic and insane children, which the ratepayers have to support.

1. Mgr. Prov. Brown. Is your point that you cannot endow childhood where there is a father living?—You

cannot do it in times of peace, but you are doing it in times of war: you are practically endowing mothers now, soldiers' wives. You do not raise all the objections now that you do in times of peace, because the making of profits has become subservient to national life. I think the wrongs we are discussing the war will right, because it will compel people to understand that the nation cannot exist when it makes its first principle the making of profits. It must make its first principle the making of human life safe and sound.

2. THE CHAIRMAN. National memory is very short. A war gets over, and a nation soon forgets?—That has been the experience, but I think we have passed that stage now. I think that the nations are in a struggle now that will last until we have solved the problem.

3. Your State law as to mothers' pensions is different in different States?—Yes, it varies in almost every State. It covers two or three hundred volumes, and each State changes it every two years to try and get to a better system.

4. DR. SALEEBY. Have you reached finality in administration?—No, we are just starting. I have been at it since 1911.

5. THE CHAIRMAN. Your prosperous classes, the people who can bring up their children without any financial anxiety, have they large families?—I do not know about that particularly; some have and some haven't.

6. DR. REID. On what basis are payments made to widows and others?—The law says that you should give them an amount sufficient, but nothing is specified. In many States it has become a specific amount. In one State they say that it shall be an amount equal to the amount paid to an institution for each child, and that amount in Pennsylvania is about £2 10*s.* per month.

7. Of course the public institutions would not cost so much as private families?—The cost in a private family is half the cost in a public institution. Institutions count out a great deal of the cost; they count out the original investment, and so on. In New York it costs two hundred and eighteen dollars per year per child in institutions, and the mother would get one hundred and twenty dollars per child, and the result would be better. No institution can supply love and affection for a large body of children, and you cannot raise children without love and affection.

8. COUNCILLOR SMITH. Do you mean that if you had your way, judging strictly on the merits of the thing, you would prefer universal endowment of motherhood, apart from pensions as administered in America?—I would not

care to express any opinion about that. We are tending towards the endowment of motherhood now in war pensions. I would prefer making it possible for a man and woman to marry and have children without the fear that if anything happened to the man as an earning factor the children would suffer thereby. I would like them to feel that the mother would still be able to maintain them in health and comfort, and under her own care.

9. Under normal circumstances, wages have no relationship to the number in the family, and a single man may be earning as much as a man with half-a-dozen children?—I have not been trying to get over that difficulty, but to deal with the mother where there was no father about.

10. MGR. PROV. BROWN. Under what circumstances is a pension in America granted?—Some laws say if the father is dead or incapacitated from earning.

11. Would the mother lose the pension on remarrying?—Certainly.

12. Do you think that makes for morality? If a woman of, say, twenty-eight, with three children, were to become a widow, you would say she must not remarry?—Yes, unless she married a man who could take care of her children as well as any others there might be.

13. MISS MICHELMORE. What would happen if a woman had an illegitimate child?—The pension would not apply to her.

14. If she was a deserted wife?—She would probably lose the pension if she had an illegitimate child.

15. And the children would suffer because of her action?—They might, if taking the pension away would cause them to suffer. Your Society demands that the children shall be punished for the sins of the parents.

16. THE CHAIRMAN. Supposing a woman having legitimate children has, after she has been deserted, an illegitimate child; the legitimate children would be deprived of the benefit?—I have no experience in such a case. I do not believe that there ever was a mother who was getting a sufficient pension who had an illegitimate child. I believe that her maternal instinct is so strong as to make her protect the children she already has.

17. LADY WILLOUGHBY DE BROKE. Do you contemplate that in the future the grant will be extended to all mothers in the same way as some people approve of universal endowment here?—That is mere speculation; I have not gone that far.

8. LORD WILLOUGHBY DE BROKE. At the Central Hall the

other day Dr. Schofield read a paper and foreshadowed a state of things where a mother, after having five or six children, should receive a mother s pension for any additional children she might have. Do you remember?—It did not make any impression on me, because it seemed to me impossible for anything practical to come out of it. My experience is that as soon as you do anything that touches the profit system, which uses the necessities of the mother and children to force a man to labour, then you have all the societies after you and you cannot progress.

19. Dr. Chalmers. In this country we have a Poor Law, and in Scotland we have a system of relief. The law intends that no one shall die of starvation. Is your scheme for the relief of motherhood any way different from that?—My scheme contemplates giving the mother sufficient so that she is relieved from economic worry. The Court decides the amount to be given her, and in some States it all comes from the county, *i. e.* the local ratepayers, while in other States it comes half from the State and half from the county.

20. My impression has always been that in some of the States there was a definite grant in aid of the family, but it appears that it is only given to deserted women, or women whose husbands are dead or incapacitated?—Yes. It is not a maternity grant at all. It is poor relief, the difference between that and the system here being the difference between sufficient and insufficient relief.

21. Dr. Saleeby. There is surely another difference, that she is not a pauper, but a State servant?—Yes; the State is employing her to care for her children, the father being away, just as you employ a foster-mother.

22. Do you consider it would be a good thing to ask for the separation allowance to be continued after the war, when the husbands will have come back, and when the mother will be endowed by the earnings of her husband?—When the man comes back you will have peace, and provided you have no acute fear of war, and society reverts to the making of profits again, no allowance to the man with a family would affect that system.

23. The Chairman. Public opinion in America would be dead against anything of that kind in time of peace?—Yes.

24. Dr. Routh. Is there any question in the States of the endowment of illegitimate children?—Yes, that question is being fought all the time, but I have not entered into it.

Statement of JUDGE LINDSAY

All the new social inventions and legislation are based primarily upon what was so beautifully said in England more than a hundred years ago, when Lord Thurlow said that the State in its capacity as the over-parent was not only burdened with the responsibility of looking after the child when the child needed help and assistance, but that there was no child in the realm which its long and strong arm could not reach to succour and protect. The whole superstructure of law that is being erected in America and in England, and that you are struggling over now, grows out of that acknowledgment by the State of its responsibility. The State is not primarily concerned with the mother, except in so far as it is necessary to produce good citizens by caring for her children. The function of the State is to take care of the children, but the State recognises in our social system that the father must be the breadwinner. We must hold to the family unit. We started with a system of legislation that we got from men like the Earl of Shaftesbury, when he fought so valiantly for the first child labour laws. The State says you shall not send your child to work until it reaches a certain age, and that if you do send it to work it will send you to gaol. The State says, I want the child to refrain from work, because I am the child. The State is the child, and the child is the State; and the State permits you to have the custody of the child, not because you own the child, but because of the natural ties of love and affection. After the first child labour law came the first compulsory school law, on exactly the same principle. Then came what we call the juvenile law. When a child is morally stunted and commits a theft or a crime, the State will step in and interpose its authority, but not to send the child to gaol, as you do here in England. In the Children's Charter of 1908 you go back to the State, not as the super-parent, but as the avenger, who says, "I am going to punish you for your acts, to remind you that if you do these things again you will be hurt." That is the basis of the criminal law, and it is not right to put a child in that category while it still continues as a ward of the State. We in the United States say in this third law of the series: If the parent is not able to take care of the child, and it runs loose and gets into trouble, it is not because we want to punish the child that we bring it to court, but because we want to help it and to make it a good citizen. In this country that is being done in spite of the law and not because of the law. It is

on the fundamentals of these three laws that we must erect our superstructure, going from one law to another, and building up a new and magnificent code. The juvenile laws speak of delinquents and dependents. A child is a delinquent if it goes into a saloon, although the parent may have sent it. A delinquent is not necessarily a criminal child; it may be a most dutiful child, and the State sees the importance of protecting it. The child of a mother who is helpless or sick is called a dependent child, because it invokes the over-power of the State. A child may be starving in its own home, but instead of taking it away, we say we will keep it there because we know we shall then get the benefit of the mother-love and affection. We started with great institutions for two hundred or three hundred children, and then we came to the cottage system, with ten children in one institution and a man and woman at the head, and eventually it dawned upon us, why not keep the children in their own homes? Before a Committee or a Board, or sometimes an informal Children's Court, a mother wishing for assistance would file a small petition "in the interests of Johnny Jones," and in the petition she said that the child was in need of the aid and assistance of the State. She said the State required her to keep the child from work when she herself was sick and needed its help; she said she had suffered for the child and brought it up, but that she recognised the power the State had, and knew that the State recognised her right to have the custody of the child. The rights are very well balanced. The whole thing is primarily for the child, and if the mother says the allowance made by the Committee is not sufficient, she can ask for a rehearing. In Colorado and Illinois we do not fix the amount definitely at twelve or fifteen dollars. If the mother cannot take care of the child on fifteen dollars a month we make it twenty-five dollars, and I remember one case of seventy-five dollars. Then we have a non-support law, which says that a man must support his child whether legitimate or illegitimate. The State helps the children whether legitimate or illegitimate, and the whole thing is a legal right and not a charity. The State can only be invoked where it is necessary to help the child. To call it the endowment of maternity is a misnomer, but there is a Maternity Bill, and that is based on entirely the same principle.

THE CHAIRMAN. I think you have a statement to make with regard to the protection of adolescence from venereal disease?

JUDGE LINDSAY. I have given special attention to that, because the Secretary of War has asked me to, and because

at my court we have specialised on it for girls. All the Governments are providing for guarding against infection by men in France, where I have just been. At such institutions as the University Club you can find prophylactic tubes, and the treatment is used both before and after exposure. The Y.M.C.A.s are indirectly doing the same thing, but they limit it to after exposure. That is being done for men, but there is nothing done for women, especially the young women who run about the streets of all our cities, quite as bad in America as here. In Paris I saw one hundred and fifty men at one station, all lined up for treatment against infection, but you cannot imagine women or young girls lining up anywhere for prophylactic treatment. I believe in supplying both moral and physical prophylactic treatment. I have spoken with a good many of our medical authorities, and they have all agreed that there is very real and grave danger in not extending the treatment to women as well as men. In America a soldier would be penalised if he did not protect himself. He would be court-martialled and fined, and perhaps he would lose his pay if he did not go within three hours for prophylactic treatment. In dealing with girls, unless you have a Central Chancellor's Court of some kind, or a court to which a magistrate interested in the matter is appointed, or a Court of Referees interested in it, you are not going to get the truth out of a girl, and without the truth you can do nothing. If we can fight the disease among women as well as among men, we can do something to increase the birth-rate by preventing the sterilisation of women through disease. We have to face the facts in this war, horrible and terrible as some of them are. When demobilisation comes, these conditions are going to increase the sex problem. We must try and keep the fundamental principles in line and to build on that line. We must get away from formalities and legalities and get to humanities.

Sixth Day

Monday, September 30, 1918

Dr. C. W. Saleeby, F.R.S.Ed., in the Chair

Statement of Mrs. Ransome Wallis, Hon. Director of the Mission of Hope

The enormous need of friendly help to the unmarried mother is admitted on all hands, and also the need of help

for her child. That help should be given quite apart from the workhouse. The recommendation that this help should be given was most emphatic in the Royal Commission on the Poor Law in 1908. We all know that the unmarried mother is a class most redeemable and most helpable. In dealing with many thousands during twenty-five years one has to regard the present Poor Law as an agency for the degradation of the girlhood of this country. No more futile scheme could possibly be devised, lacking in every essential point. The point in which it falls so disastrously short is the utter lack of classification. We get young girls, belonging to respectable working-people's families, from seventeen to twenty years of age, mixing freely every day with the very vilest women on the face of the earth, criminal people who have spent a large part of their lives in prison, and these people mingle freely with these young girls, and the evidence even of Chairmen of Boards of Guardians is, that when a girl goes into the workhouse she cries bitterly and begs of the Guardians to help her when she goes out, but after being there for three months she wants to go out, and does not want any of their help, but tosses her head and says, "I have learned a thing or two." It is no one's business to try and influence her or show her the importance of trying to retrace her steps. She goes there without any advice or help to uplift her at all. No class of person can possibly be found more unfit to help such women than the ordinary Poor Law officials. Again, the whole scheme, if you go to the root of it, is intended to bring the expense of such cases within their own parish, and not to let them be borne by another parish, quite regardless of whether the girl is going to turn out a criminal or a good and fine woman. Therefore we feel that we are only saying what all rescue workers admit, that the Poor Law is not a proper authority to have anything to do with the unmarried mother.

The national importance of this whole subject is threefold. We have to consider that if the mothers sink to the depths, they are not likely to marry respectably or to become the mothers of healthy, self-respecting citizens. Secondly, if mothers sink they become a moral danger as well as a permanent financial burden on the State. Thirdly, if mothers sink, the infant life is too often wasted, thrown away from recklessness. Our experience has been that the Government should adopt the same plan as has been so successful in New Zealand, namely, that instead of having workhouses, where the girls are accommodated, the money should be spent in subsidising voluntary societies with substantial

grants, and thus enable them to carry on the work now done by the Poor Law so ineffectively. This during the last three or four years has become an actual fact, and to those of us who have written on this subject for years it is a very great delight to see the passing of the Maternity and Child Welfare Bill. The grants are to be made where the home is thoroughly approved of, and will amount to half the cost of the home; therefore, out of our ten homes we hope to get the grant in respect of about seven of them. All maternity homes will be included, and babies' homes for children under five, and homes where mothers and babies can be kept together for at least six months from the birth of the child. Therefore we look to the future with the sure prospect of great strides along these lines. During the last twenty-five years the financial question has often been extremely difficult. We do not think we shall have that same barrier to contend with in the future. A much larger number of these girls will now be brought into the safe friendship of good women, who will mother them and help them, and therefore the outlook is a very delightful one. Without such help there is no assurance of improvement. They do not improve at all morally because some person is paid to give them their breakfast and dinner and tea who has no interest to induce them to look at things in a different way, and to try and rise to a higher level. Pensions to unmarried mothers would be, if possible, more disastrous to the uplifting of the mother than even the workhouse. The thought of giving a young woman as much money as she wants to live an idle life—putting her out on the town to live an idle life—is unpromising; I would give the baby five weeks to survive it, and I do not think it would be more than that. One has seen so much of that kind of thing. A little ill-timed help or charity given by relatives does not give her that additional ballast which she needs to her character, and one feels that this proposal will be fraught with disaster if it should ever come into being. The treatment of the "second case" is one which is much more complex, and which presents at this time a very grave national question. Very few voluntary societies will admit a second case. There is a feeling that it is right and wise that the punishment should be greater, and that it is an unwise and wrong thing to do to attempt to help a second case. I must plead guilty to being unorthodox in this and in some other matters. For years we have been attempting second cases with most excellent results. The result of the Societies not feeling able to attempt to help second cases is that the mothers are

in the workhouse sometimes for years with the two children, morally deteriorating and altogether hopeless of ever going out again, and associating with all the vile women in the town, and they can do nothing but go down to the depths. The mother is shut out from all responsible work and from respectable marriage, and then one day she becomes one of the depraved women of the town, and in the *interim* she is costing the country an immense sum of money. I have only got figures from books dealing with them—the Royal Commission on the Poor Law for one thing. I have been unable to secure from any source the precise figures for this year, but as far as I can make it out, there are to-day 15,000 second cases in the workhouses of England, Scotland, Wales and Ireland, and on an average they have two children each with them. Some have more than two children, others have less, but the average works out at about two children each. They are immured in the workhouses, for I make the average about two years each, and the cost to the nation is enormous. During the next twenty years we shall all understand what it is to exercise every possible economy, both in private and national life, in order that we may pay for the war, but not less than sixty millions will be wasted in looking after these unfortunate second cases, in dragging them down to the level of the vilest people in the town. The money is worse than wasted; it is a very serious factor in the demoralisation of the country, and in the infant death-rate, and in the production of criminals from both mothers and children. I have come across numerous women immured in workhouses, and have found out how utterly unendurable they have become. Some have got away, and have gone straight down to crime and prison. I have met many poor lasses brought up in the workhouse, and as soon as they have been put out they have gone straight to the bad. I have frequently received letters signed by all the wretched inmates of the workhouse ward imploring me to go and take them all out. I have never been able to do that in a wholesale way. We have been able to take out between fifty and one hundred during the last few years with the very best results. A little help for one child, or it may be an adoption, a few clothes for service, a little kind friendship, and we can get her a situation in less than a month, and there she can begin her upward way, and in many instances it has been with most satisfactory results. Many workers object to help these women on the false assumption that they are more wicked than others. This is quite a mistake. Certainly they are far more grateful. I remember one case where a woman was

almost going out of her mind. Her story was absolutely appalling in its sadness, but I never knew a more broken heart or a more grateful soul. To get her right took half the week, and the other half was taken up with a young hussy of seventeen, the daughter of respectable parents in Cornwall, who had set her mind to give us and her parents all the trouble she could. I have smiled to think that any one should believe a broken heart is more trouble than a young hussy of seventeen who has not begun to learn what it is to suffer. Some people feel that they are too bad to be lifted up. I had a letter recently which commenced in this way: "This, I am sorry to say, is my second disgrace. I know that God cannot forgive a second case, but I understand that you can." That is a very concise way of putting it certainly. I believe that the objection which workers have, is that there is no cure in this matter, but is it not rather that we have not understood how to work a cure? We were told when we were young that there was no cure for consumption, and that there was no cure for what we now call appendicitis, but we now know better, and I feel that perhaps in the moral sphere we have not gone the right way to work. We want larger doses of love and sympathy. Once our Committee had a rather hot argument on this point, I think about seven years ago. It was as to whether we should take in a second case or not. I saw the importance of taking it in, and rather pressed for it, and at last it was decided that I should have a personal interview, and then, if I was satisfied that it was worth helping, we should take it in. The case came at a particularly busy moment, but I sat down and sent for a cup of tea, and we got into very close quarters. This woman now tells me that the work of restoration was begun in her heart before she left that friendly cup of tea. It is a most beautiful instance of how these things lead to right. The woman obtained work as a clerk, was then promoted as a nurse, and then became assistant matron, and she is now a valued matron of a little girls' home and has been for three years. She is hoping to be married, and we feel that a more genuine Christian worker could not be found anywhere. Societies should be asked by the Government to assist the national cause by undertaking the care of these women. I have brought forward second cases to our Committee, who have said at once that it did not seem quite right to take them, but when I have observed that the case has been sent to us by the Local Government Board, the Committee have said that in such circumstances we would take the case. If only the

Local Government Board would ask the Societies to help them in this matter, the Societies would quickly put aside the little prejudice they have. A grant of £10 per annum should be made for the maintenance of the first child through a Society which is taking care of children, or a Rescue Society. The mother and her second child can then be received into a hostel for mothers and children, of which many will spring into being owing to this new grant. The £10 should be dependent upon the mother's right conduct on leaving, and she should be placed under a lady intermediary, as in Dr. Barnardo's Auxiliary "Boarding-Out," the most perfect organisation. I happen to have been a lady intermediary in a great many cases where we have applied to Barnardo's to give us a grant, and we have had a child given to us, and we have put it into one or other of our homes, and have looked after the mother personally. The girl, directly she goes wrong, knows that the help stops and that ruin stares her in the face, and that the workhouse stands before her. The result is magical. There was an instance of a girl who said she would take no situation except in Croydon. I knew why, and I said to her, "You will take no situation except what I find for you." I told her that I should write to Dr. Barnardo, and in two minutes she climbed down, and as long as I did not write to Dr. Barnardo's she was willing to take any situation I found. The knowledge that if she begins to go wrong the allowance will be withdrawn is, I think, a most excellent means of discipline for these girls. Some such scheme as this would mean a very great saving of useless expenditure, and what was spent might accomplish the right bringing up of many poor children not now being brought up in the right way. As regards *Adoption*, we believe that closely allied to the problem of reinstating the man-power of the country is any method which would give homeless infants who are without much prospect of a happy and sheltered life the best possible up-bringing at the smallest possible cost. Adoption on the following lines has been found to be altogether successful during twenty-two years, and proofs are not wanting of the happy and useful lives of those fortunate enough to have been so brought up. It is enough to say that amongst the 530 adoptions which we have worked, many are now in touch with us; five of our boys to-day hold commissions in His Majesty's Forces; one, an intelligent and highly educated woman, is in a high position in the War Office, with a large number of girls under her. I took her from her dying mother's arms when eighteen months old; we were able to get her adopted when

she was about ten, and she is to-day doing extremely valuable work. I have brought with me the forms and agreements which we use in this adoption system, and we have sometimes calculated that with the second cases we have taken out of the workhouse, we have saved the country half a million of money, and we hope that along the same lines we may be able to do still more. It sets the mother free to marry, and it gives the best possible opportunity to the child. The great need is that educated women should come into closer personal touch with these poor women, and should see their real difficulties and troubles, and should strive to initiate work which shall mitigate the terrible sorrow which come to these women from their false step. We have first of all the mother's agreement, in which she undertakes, in the words of the Barnardo Act, that, being unable to support the child herself, she now appeals to the Society to become its guardian. Out of 530 cases, we have never met one solitary mother who wanted the child back again. We have never come to any absolute difficulty at all, but we believe that the Court would stand by us because of these words in the agreement should the necessity arise. The mother signs that agreement, and then there is a further agreement entered into with the adopting parents, in regard to whom we have had references in the meantime, and have ascertained a little about their position, and they agree that we may inspect the child until it is sixteen years old. They also agree that if for any reason, any unforeseen circumstances, they should wish they had not contracted the adoption, they have only to write to us, and we will take the case back again the next day. We have done that in twenty cases out of the 530.

1. Sir Edward Brabrook. In regard to registration, what omissions do you recommend? I take it you suggest that the truth, and nothing but the truth, but not the whole truth should be given?—Not the whole truth. Judge Neil of the U.S.A. suggested that there should be two registrations, one simply giving the name and date of birth, for business purposes, and the other giving full particulars of the mother and father, which would, of course, reveal at a glance if the child was illegitimate.

Dr. Stevenson. You will be interested to hear that that is the Registrar-General's proposal for this country, that is to say, a full registration with all obtainable germain facts, and then, in nineteen cases out of twenty, or ninety-nine out of a hundred, an extract would be given which would not contain any particulars which would be incriminating.

2. COUNCILLOR SMITH. Are you in favour of the National Council's scheme as indicated in the circular brought before us some time since?—I have not seen it, but as far as I know its programme I am in favour of it.

3. Do you think the work should be carried out by voluntary organisations or local authorities?—Voluntary organisations. I think it needs to be done by people who have made it their life's work to know how to influence these girls. Local authorities are not always keenly interested, and have not always any particular knowledge or experience or desire to help.

4. Are not the authorities already engaged on maternity and child welfare work qualified to continue it?—I fancy their work would not always be so successful as that of those who are making it a life study to know how to alter the whole course of the lives of these women.

5. Should the voluntary organisations be religious organisations?—I have a grave feeling that if they are not they will not be so successful.

6. You would have organisations for Catholics, Anglicans, Nonconformists?—Certainly.

7. And non-believers?—They will find plenty of people to help them, but I should not have thought it worth any one's while to run a society for non-believers.

8. Do you suggest, say, three separate homes for this work in one district? There are many more than three in London.

9. In provincial towns?—There comes the larger question as to whether it is wise to help a girl in her own town. I think it is the last place on earth to help her. It is a great deal better she should go away to a home of whatever denomination her parents think it desirable for her to go to.

10. There are 300 cases annually in Bradford. Do you suggest we could get 300 Bradford mothers who are going to have illegitimate children sent to outside organisations every year?—We are taking mothers from all over England; the mothers prefer that, because they do not want the stigma to remain with them afterwards. If they go right away the neighbours do not hear of their trouble.

11. DR. SALEEBY. Would you have London homes receive illegitimate children and their mothers from all over the country, or would you circulate, say, the Bradford cases to Birmingham?—Circulation is the point. I do not mean that London is the only place where this can be done.

12. COUNCILLOR SMITH. Do you think people in the localities would be as willing to contribute to homes where strangers were cared for as to homes for their own local

girls?—People do not think on those lines; they do not see any difference between the girls.

13. Dr. Saleeby. Your objection to mothers' pensions is strictly to the unmarried mothers?—Yes, I think of unmarried mothers I know well, and I imagine what would become of them if they had £1 a week for four weeks even. The question is, would such a mother lead an idle life or mother her child. What they want is more ballast, more conscientiousness, and more right-mindedness. There are some mothers one would not trust with their own babies for twenty-four hours.

14. Dr. Garvie. The local authorities might be responsible for financing the work and call in voluntary workers to carry it out?—Yes, it might be that that would be the solution, provided the right kind of people come into touch with the girls.

15. Councillor Smith. You admit that this is a national question; is it fair to leave the financing of it, one-half of it, to voluntary effort?—A great many of the girls will pay something towards their own keep. I think voluntary contributions bring with them a source of interest and keenness such as is never present when the funds are provided out of the public purse.

16. The Chairman. You are assuming that enough money could be found voluntarily?—I believe it could.

17. Dr. Stopes. Do you maintain the position that all illegitimate mothers would be irresponsible when it came to pensions?—A large number would.

18. Don't you find that the sense of independence and freedom has a great and good effect?—Not to the extent it should where they are not overlooked. I could introduce you to 500 unmarried mothers, and out of that number I do not think you would find two who could be trusted with a pension. They need control and supervision. They would be at cinema shows every night, and the poor baby would go. Any one in khaki they have only to see, and they will go with him to the cinema or anywhere else.

19. The Chairman. They really are a special natural type?—Yes.

20. Dr. Stopes. Have you formed any idea as to how these babies originated?—Some are the result of real love and others of shameful tricky promises and misrepresentations. We are going through very different times now from what have been known before. The whole problem is absolutely different.

21. You think if a child was the result of a trick it

would suffer for the rest of its life in the eyes of the mother?—No, she would probably be very devoted to the child. Women are not so much to blame in these days as they were before the war. Many of them are extremely young, and many of them have never had five shillings of their own to spend, while many of them are such children that you would marvel that they had attained eighteen years. They are utterly unfit to manage themselves or their children alone. I think these girls represent the war-time mothers of the whole country.

22. DR. SALEEBY. The absolute number of cases has not risen during the war?—I know, but I cannot understand that. I do not believe one rescue worker would not say things were far worse now than before the war. My Committee have had more than double the number of applications—we have had three thousand applications since January 1st, which is double the usual number. We have doubled the number of our clerks. At all munition works there are delightful welfare workers, and it may be that there are not so many girls who now go unhelped as there were before the war. It may be that the welfare workers are more energetic. I certainly think that while numbers of soldiers' wives at home are giving birth to illegitimate children, they do not register them as illegitimate.

23. DR. CHALMERS. In regard to munition workers, in what sense have things differed since the war began?—They are a different type from what one saw before. The girls who come out of the munition works have not been improved since they went into the works. They are a louder and more objectionable type of girl. They are quite different mentally. Women who were in civil life before the war used to come in somewhat ashamed and sorry, but the women who are on munition work now are not ashamed or sorry. If you do not know what they want they will very soon tell you.

24. Of the total number of cases, what is the proportion of those with a first child?—At the present time we are having as many second or subsequent cases as we have first cases. Most societies restrict themselves to first cases, and the other cases go into the workhouse. I would help a second case if the mother seemed worthy before I would help a first case, because there would be twenty friends quite willing to do that.

25. Do you ever meet with cases where it is desirable to separate the mother from the child?—Very seldom, but it does happen.

26. THE CHAIRMAN. Are they feeble-minded mothers?—Partly, we have met a few cases where the woman has been filled with absolute hatred of the child. I should not think such cases would be one in five hundred.

27. What proportion do married mothers form to the total number of mothers of illegitimate children?—I should think twenty per cent. of illegitimacy is among married women.

28. MRS. CLAY. Do you think second cases are more helpful than first cases? Do they feel more ashamed the second time?—Yes. I think the woman who applies about a second child is in a much more helpful frame of mind. A young girl does not know what she is going through, and what terrible disgrace and misery she is going to bring on herself, but the second case has her first experience before her.

29. The second cases are the result of first cases not adequately looked after?—Yes, a large proportion of second cases follow first cases of births in workhouses.

30. When adoption takes place the child is cut off from its mother?—Yes, but we are very careful. If the woman is about to marry a man who is not the father of her child, then we hold that it is only fair that the child should be brought up by others. If the mother has emigrated, and has since had a family in the colonies, we consider that a suitable case for adoption. We never adopt two children of any one woman. We hardly ever adopt children born in our maternity home.

31. You said the allowance for a first child would be stopped in case the mother again transgressed; that means no allowance for a second child?—I reckon a mother can support one child. If a mother has two children, one aged four and one just born, it would be better to put the four-year-old into a home or with a foster-mother, and let the mother fight the battle for her second child.

32. DR. STEVENSON. Do you know many cases of women having illegitimate children who would not have had them but for the circumstances of the war?—Yes, our percentage as regards soldiers and civilians at present is at ninety-five per cent. of soldiers, but seeing that all the young manhood of the country are soldiers that does not mean anything.

33. Before the war half the illegitimate children of the country were children of domestic servants; these latter have gone to a considerable extent into munition works, so that the same class of women may be having illegitimate children apparently owing to a war that they might have

had otherwise?—Yes, but women from munition works are much more intractable.

34. COUNCILLOR SMITH. Can you give us any idea of the percentage of cases where a mother who has been properly cared for with her first illegitimate child has a second case?—I should think ten or fifteen per cent. during the war, and less before then.

35. MGR. BROWN. Is it because there is less chance of getting married now?—Many of them have gone through a form of marriage.

36. DR. SALEEBY. Do you have many feeble-minded mothers?—Yes, but so slightly feeble-minded that it is not discovered for a good while.

37. Do you find that the passing of the Mental Deficiency Act, 1913, has helped you?—We have had fewer feeble-minded people to deal with.

At this juncture a letter was read from Dr. J. W. Ballantyne. The letter described the way in which unmarried mothers are looked after in Edinburgh, and said: "In the first place, as to the unmarried mother in the time of her expectancy: (*a*) If she is healthy provision is made for her in the Lauriston Home . . . You will notice that a *sine qua non* for her reception into the Home is that she must be pregnant for the first time. Whilst she is in the Home (it may, of course, be for months) she is usually sent to me at regular intervals at the Expectant Mothers' Clinic in the annexe to the Maternity Home, which is practically in the same block of buildings as the Lauriston Home. I see and examine her there, and if the pregnancy is progressing normally, I do no more than instruct her in the ordinary hygiene of the time. If, however, I detect any diseased condition, I prescribe for her, and instruct the Matron of the Home to do the necessary things for her; but if her health is seriously affected I get her taken into (*b*) the Pre-Maternity Ward for the Diseases of Pregnancy in the Royal Maternity Hospital. There she receives treatment until she is well, when she returns to the Home, or until she is delivered of her baby, when other arrangements (*vide infra*) are made for her. In the second place, as to the unmarried mother in the time of her confinement, provision is made for her in one of the large wards of the Royal Maternity Hospital, known as the Unmarried Mothers' Ward, or, if her friends are able to pay for her, in a smaller ward with two or three beds. In the third place, as to the unmarried mother and her illegitimate child after her confinement, provision is made in the Infants' Edinburgh Home, Admiral Terrace.

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Both the mothers and their first babies are admitted. There are at least two defects in the provision thus made in Edinburgh: (1) It only meets the needs of a fraction of the cases. It is provided on charitable foundations, and is dependent for support on the general sympathetic public, and, by a strange twist or obliquity of outlook on moral problems, the public still thinks that it degrades itself by recognising and aiding in the amelioration of the lot of such 'unfortunates.' We ought to be able to meet the needs of all the cases. (2) It only provides for women expecting to become mothers for the first time. I quite recognise the meaning of the restriction, and agree with it so far that it does seem to be necessary that a certain obstacle should be put in the way of a girl, after having a chance of being reinstated in civil life, if she has abused the first opportunity. But it leaves a problem quite unsolved—the fate of the unmarried mothers and their babies resulting from pregnancies later than the first. Many of these girls had no chance of repatriation, so to say, at the time of their first expectancy, and it seems a chance should be given."

38. THE CHAIRMAN referred to the reference in the letter to the Home being a charitable foundation, and asked for the observations of witness.

WITNESS. I don't think that anything supported out of public funds would be quite so successful as if supported out of voluntary funds. There is great need for additional work, of course.

39. THE SECRETARY. You fear the Poor Law Authorities going into the rescue home?—Yes.

40. DR. GARVIE. You would agree that only a small proportion of unmarried mothers in the country are being helped?—Yes.

41. If it is accepted as a public responsibility, the agencies will have to be more extensive?—Much more.

42. Do you think that can be secured by voluntary effort?—I think and hope so.

43. You are anxious that there should be human influence; your end would be secured by co-operation between voluntary and public effort?—Yes.

44. COUNCILLOR SMITH. How is it that there is such appalling leeway to make up? What has voluntary effort been doing in the meantime?—I think the work has been left to the workhouses, and people have not considered that they had any responsibility.

45. THE CHAIRMAN. If we were to create a Ministry of Health totally apart from any Poor Law tradition or con-

nection, would your objections to the official agency be still maintained?—I still think that the philanthropic and the religious agency would be the more effectual, but every one would welcome the help of the Medical Officer of Health as perfectly invaluable.

46. DR. GARVIE. Would you explain the absence of a registered increase of illegitimacy by saying that girls know how to prevent pregnancy more than they did before. We have had evidence of greater knowledge of methods of prevention. Do you think there is more immorality although less illegitimacy?—I think there is more immorality, and that probably what has been suggested is true, but I have never yet met a girl from whom in conversation I have made out that she had used preventive methods. Fifty per cent. of the girls have admitted the use of drugs.

Statement of DR. GEORGE REID, D.P.H., County Medical Officer of Health for Staffordshire

Milk is one of the most valuable foods which we have, but, at the same time, it is the dirtiest article of food we have, and it contains dangerous properties from the point of view of disease. The number of deaths from tuberculosis in England and Wales, is 54,000 per annum, and of that number something like 14,000 are due to tuberculous disease of bones, joints, the brain, etc., which latter, to the extent of something like forty per cent., it is estimated, arise from tubercle conveyed by milk. That means that about 5,600 children die annually from tuberculous milk, and this by no means represents the injury resulting from such milk. We have, in addition, permanent injury among those who do not die, but who suffer as cripples; namely, those suffering from spinal ailments, hip disease, ankle disease, etc., and there is no doubt that dirty milk conduces much more readily to epidemic diarrhœa than does clean milk. Then we have beautiful children who have to have their necks and other parts of their bodies disfigured by dissecting out tuberculous glands, the result of contaminated milk. This being the case, it is amazing that the public should have tolerated this condition of things so long, and they would not have tolerated it had they realised the facts. Milk to look at looks a clean article, because, unfortunately, it is opaque and you cannot see the dirt in it. If it was a clear fluid like water, and you could see the dirt in it, I do not believe for a moment that any one would drink it. We have absolutely failed, or almost absolutely failed, to effect

any remedy by the action of the authorities hitherto, that is, any material remedy. The Sanitary Authorities, at any rate the smaller Sanitary Authorities, like the public, cannot be roused in the matter. This is not remarkable, for the mass of the milk comes from rural areas, and the members of Rural District Councils who administer the milk orders are very largely farmers. They are ignorant as to how milk should be produced; they are beset by tradition with regard to how cows should be kept, and it unfortunately happens that they adopt the worst methods possible, and house their cows under conditions which conduce to tuberculosis rather than to health. In Scotland—I do not know whether it is so now, but it used to be—a man milker was a thing unheard of. In England most cows were milked by men before the war. I do not know whether women would be cleaner, but I think they would; at any rate, we have this example of the cleanliness of women in connection with milk, that as soon as the milk leaves the cowshed it is handed over from men to women, and scrupulous cleanliness is observed. All the milk-cans are polished, and everything is perfectly clean, the floors of the dairies and everything are kept sanitary. It is a solemn process, the storing of milk in a dairy, but unfortunately eighty or ninety per cent. of the dirt is already in the milk, and it is really pathetic to see the great care taken after the mischief is done, which is immediately the milk leaves the cow. This arises from the horrible state in which the cows are kept, the entire absence of grooming, the dirty condition of the milker, and the absence of all care to keep dirt out of the milk. In America they use a special form of milking-can by which the milk can only enter at the side: the top is covered in. The ordinary milking-can used in this country is used obliquely. There is no reason why the American milking-can should not be introduced into England, and if it were, that would keep out about eighty per cent. of the dirt that now gets in, but practically no one will adopt it. The rural authorities, being composed largely of farmers, are the very worst bodies to supervise the milk supply. The smaller urban authorities are extremely inactive, and they only have control over cows in their own areas. The cows are kept in most disgusting conditions, and in larger towns the authorities have to go to endless trouble, involving an enormous amount of work, in order to maintain anything like a quality as regards freedom from dirt, etc. Now the Government recently—I am not sure if it is an order yet—suggested, and it is coming into operation, the recognition of qualities in milk, and the recognition

of prices in accordance with quality—quality, that is, not from the point of view of the Food and Drugs Act, but from the point of view of dirt and tubercle. That, I suggest, is not a satisfactory remedy. However necessary it may be to adopt some measure of that sort at the present time, it is not the right way to deal with this question at all, because it is accepting the position, and taking it for granted that you cannot have clean milk, or milk free from tubercle. Now that is not the case. With proper administration on the part of the Sanitary Authorities, and with care with regard to the herds of cattle, you need have no tuberculous cattle giving milk, and no tubercular milk. This can only be looked upon as a makeshift remedy, and we must look to the future for a practical and sound remedy. This may be found in the Milk and Dairies Consolidation Act, which comes into operation after the war, and which gives powers to County Councils and to County Borough Councils which are now held by Rural and Urban District Councils. Some time ago—I forget which year, 1913, I think—a Tuberculosis Order was passed by the Board of Agriculture and Fisheries enabling local authorities—County Councils and County Borough Councils only, in this case—to subsidise farmers who followed instructions with regard to their cattle as to cleanliness and freedom from tuberculosis. Now that order is suspended during the war, but I hope it will come into operation again after the war, and that, combined with the Milk and Dairies Consolidation Act, will provide machinery which should solve the whole difficulty. Now I come to the sole object I have to-day, and that is to impress this upon the Commission, that in order that the Act and the Order may be properly administered, there is one essential, and that is, that the officers employed to administer the Act and the Order shall be whole-time officers with proper experience—veterinary surgeons properly trained, devoting their whole time to this particular work. I will give an example of what happened under this Order in Staffordshire. When I was consulted with regard to machinery, I recommended the County Council to appoint three and possibly four whole-time, well-trained veterinary surgeons, giving them proper machinery for carrying out the work. The Committee appointed to administer this Order, because it was a milk subject, was largely composed of farmers, and the result was that they did not appoint whole-time officers, but appointed part-time local veterinary surgeons. In other words, they appointed the men whom they employed to do their own veterinary work, whose livelihood depended upon the good-will of the farmers.

The result was that the Order was a dead letter, and worse than a dead letter, because they did not recommend the destruction of animals until they were practically asked to do so by the farmers, and the farmers did not ask them to do so until the cow had become no longer a paying milker. So that the effect was a huge scheme for compensating farmers for killing dying animals. Meanwhile the public were consuming tuberculous milk to a larger extent possibly than they would have done if there had not been any compensation. I suggest that it would be as reasonable to have part-time policemen to control the persons who placed them in such a position, and upon whom, as regards their other work, their livelihood depended. What I suggest is that some lead should be given to the Government Department as to the drafting of orders and as to the administration of the Order of the Board of Agriculture and Fisheries, and that it ought not to be left to the local authorities to appoint part-time officers; they ought to be compelled to appoint whole-time officers and to pay them proper salaries. I believe the Department would be glad of some indication of that sort coming from this Commission, but before any resolution can be drafted or should be drafted, I think you ought to hear the evidence that I have undertaken to get placed before you with regard to the eradication of tuberculosis from cattle and the maintenance of healthy cattle, which evidence will be given by men who have done much practical work in that direction. I think that evidence will be very convincing, and I hope the Committee will agree that resolutions should be drafted on the lines suggested.[1]

1. Sir Edward Brabrook. It is entirely in regard to the future that you propose whole-time officers?—Yes.

2. Councillor Smith. I understood you to say the American method was undesirable with regard to the certification of milk?—Yes, as regards the grading of milk.

3. Is it not perhaps the only way in which you can begin to grade milk in this country?—I intended that to be inferred, but we ought not to look upon it as anything like enough.

4. What about the inevitable increase in cost?—The increased price ought not to be very material. If people like to pay for having milk delivered in bottles, they ought to have it, but there ought to be no need for such precautions. It is not necessary to distribute it in bottles if you keep the cows under healthy conditions, in the open air as far as possible, and use safety apparatus and all cleanly methods.

[1] See the evidence of Principal P. H. Foulke and Mr. J. D. Watson.

5. What about the risk of contamination between producer and consumer?—I don't think the dirt that gets into the milk after it passes from the producer is very material; eighty to ninety per cent. of the dirt gets into the milk at its withdrawal from the cow.

6. What is the best method of impressing the public with the necessity of careful handling?—Education.

7. DR. SULLIVAN. Why did the Order increase the risk of tuberculous milk?—The farmer has to look at the cow from the point of view of what it will mean to him as a milker compared with its value when slaughtered—whether it will pay him better to slaughter it early and hope that the meat will sell well, or maintain it as long as it gives sufficient milk to pay as a milker. From the latter point of view, the cow may be maintained until it is unfit for meat production, and then, when it is no longer of use from a milking point of view, it is slaughtered, and the farmer gets compensation. The person who values it for compensation is the veterinary surgeon who orders its destruction, and whose professional success, as regards his general practice, depends upon the farmer.

8. THE SECRETARY. Do you suggest that these officers should be national officers appointed by the Board of Agriculture?—No; I suggest that the County Councils should appoint, but that they should be compelled to appoint whole-time officers. Only large authority, like a County Council, could maintain a whole-time officer for this purpose. Mechanical milking is not always quite effective, and you cannot have mechanical milking in small dairies. The clean hand is not dangerous. People who pay high prices for milk do not always get the cleanest milk. A number of samples were taken in London, and it turned out that the cleanest were collected in the East End, although a higher price was charged in the West End.

9. THE CHAIRMAN. I have seen the Walker-Gordon Dairies, and do not see how you can possibly get such a thing without paying a great deal more?—Milk is sold by the gallon, and with ½*d.* per gallon more you could go a great way towards bringing about a radical improvement in the system of milk production. The initial cost of getting herds free from tuberculosis would be considerable, but only the initial cost.

10. THE SECRETARY. What about sterilising milk?—It ought not to be necessary to sterilise, and it would only kill the organisms; it would not remove the dirt.

11. COUNCILLOR SMITH. What would you say about

municipalisation of the milk supply—assuming that the municipality distributing the milk will have control over the farmer better than a private individual could ever get?—You would have to have control over a very large area, going into many counties, and interlacing with other authorities engaged in the same work.

12. THE CHAIRMAN. Do you know whether the increase in tuberculosis during the war is due to milk?—No, it is probably entirely the outcome of war conditions.

13. THE SECRETARY. Does bad milk apply in any large proportion to tuberculosis?—Not tuberculosis of the lungs, but to surgical tuberculosis.

SEVENTH DAY

Monday, October 14, 1918

DR. SALEEBY, F.R.S.Ed., in the Chair

Statement of RT. HON. J. M. ROBERTSON

(I) IT is natural that in time of war, especially in a war involving enormous loss of life, special demurs should be made to the practice of birth restriction. It is very significant, on the other hand, that both in England and Germany the population question should have come prominently to the front by way of new advocacy of restriction at such a time. This seems to be due to the general reconsideration of all problems of "good life" under the head of "reconstruction." Malthus's original Essay appeared in war time, when employment was good. (II) On the other hand, the idea that population should be as rapidly as possible brought up to or beyond the old level, proceeds upon a series of fallacies and oversights. (1) It ignores the fact that before the war emigration was taking place at about 250,000 a year. This was either a matter of economic pressure or of irresistible attraction. If the latter, many new births will simply be effected for ultimate emigration, to the old or a greater extent. If the former, there existed an excess relatively to economic conditions. (2) It sometimes assumes that population must be kept at a maximum for military reasons. If the peace should be a mere draw, leaving militarism on foot as before, this would be a plausible plea; but not otherwise. (3) It is usually implied that an increased

birth-rate is required to restore man-power for industrial purposes. But births after the war will emerge as juvenile labour power only fifteen or more years after the war is over. In the *interim* industry may be expected, and evidently ought, to effect great economies in labour. In a few years' time, labour conditions and production will have been thus readjusted. If after fifteen years there should set in a progressive increase in labour supply, the result must be either depression of wages or increased emigration. (III) I deny that it is a proper function for the Mother Country to lower its own standards of life to people Dominions where (as in Australia) the birth-rate is kept low. (IV) In general, all the arguments for increased birth-rate ignore all the evidence of the effect of high birth-rate on life conditions, economic and moral. Facilities for divorce of separated persons are to be desired on many grounds, but not in order to increase the birth-rate.

I cannot see that the general arguments on family limitations have in any way altered, or that the situation has been made in any way scientifically different in respect of war losses. I have seen in the Press some propaganda to the effect that it is the function of the Mother Country to populate the Dominions, and that a great regular emigration is required for that purpose. The emigration before the war was somewhere about a quarter of a million per annum, and it is feared that that will not be kept up, and it has been argued as a reason against under-population that the populating of the Dominions falls upon the Mother Country. I cannot admit that it is the duty of the Mother Country to do that if it means the burden of lower standards of comfort contingent on a large birth-rate, and if we are to do it for the purpose of populating the Dominions that will not populate themselves. If it be true that the population of Australia is not disposed to raise its own birth-rate, then I can see no force whatever in any appeal made to the Mother Country to make that good. If the population of Australia restricts its birth-rate from motives of standard of comfort and general well-being, then, in the terms of the case, the population of Australia would be expecting the Mother Country to undergo the burden of discomfort and bad life which the people of Australia themselves will not bear.

If, on the one hand, the case is put simply by Imperialists, speaking in what they believe to be Imperial interests, I would ask them: Do you or do you not expect the population of Australia to keep somewhere about its present birth-rate?

If you do, you are admitting that you are calling upon the population of the Mother Country to go on filling up, as it were, a bottomless pit; you are asking the Mother Country to go on populating a country that has refused to populate itself. If, on the other hand, you expect the Mother Country to set an example for Australia by over-populating, it means an excess of population which you are better without, or can afford to spare. If it is to set an example to the Dominion, the answer would be that the example has had no effect in the past. Whatever way one looks at the Imperialist argument on the necessity of populating the Dominions, I cannot see that there is any rational grounds for urging on the Mother Country a disregard of those principles of family limitation which are usually put as reasons for family limitation in the Dominions.

In regard to the military reasons mentioned in the précis, everything depends on the peace terms. If we get such peace terms as those indicated by President Wilson, including disarmament all round, I should think that the plausible military argument would no longer have any value. A blind multiplication of population, with the hope, or in view of making the nation strong in the military sense, would in all likelihood defeat itself. The large country which was first knocked out of the war was Russia, which had a high birth-rate and a high population. France and England had the lowest birth-rates among the European belligerents, and they have held on to the finish. The limitation of population is not the weakening of the nation, even from a military point of view, and it is a fallacy, to say nothing of the brutality of it, to argue in the way which has been done in Germany.

No. IV in my précis raises the general question of the neo-Malthusian case, which is this, roughly: that large families incurred without any thought of control mean for the families themselves burdensome conditions in life, not only economically burdensome, but greatly restrictive of good results, both for the parents and for the children, and that large families among working folk mean heavy burdens on the elder children, as, for instance, a girl of six or seven years having already at that age to be a kind of mother to a child of one or two. Children in this way have their childhood curtailed. The mother is constantly wearied and overstrained, and has no time for higher life, or even for good physical life. Very frequent child-bearing is greatly reducive of the energy of the mother, and the condition of such a family is one perpetual handicap on the father,

both morally and economically, morally in the sense that he is fretted and burdened, and unhappy conditions at home often drive him to the public-house, because the home has no ease-giving environment; and economically he suffers because the burdens upon him disadvantage him in respect of any labour struggle. As a general rule he is constrained to take what work he can under disadvantageous conditions in bargaining with his employer, and the perpetual production of a large proletariat must tend to keep wages rather low. The trade unions have always recognised the importance of keeping down the number of entrants. As soon as trade unions said apprentices must be limited in order to keep labour conditions above a particular level, they admitted the disadvantage of the pressure of population, but they never accompanied that with any suggestion to their members to limit the number of births. If trade unions find too many apprentices being offered to them, and they want to limit them, then they go and try and shove the burden of the excess upon other trades, and the burden tends to fall on the least organised trades and on unskilled labour in general. Both morally and domestically and economically speaking, from the point of view of wage-earning interests, large families have meant disadvantage to the multitude, and the limitation of families means better life for the children and the parents, more opportunity of intellectual life for the parents, and at the same time a better economic situation for both parents in so far as they enter into the economic struggle for existence.

1. Sir E. Brabrook. You object to Malthus's idea of the postponement of marriage?—Yes, it is highly immoral in its results.

2. As the age of the parents increases, the eugenic value of the offspring diminishes?—I should be inclined to put it that the value of the child born to very young parents is low, that it rises from twenty to thirty, and that there is some point beyond that where it tends to fall again. The children of parents of something like intellectual maturity of age are the most desirable births. At about twenty, the parents being quite intellectually immature, their children would be much less likely to present superior brains, and the physiological limitations of the mother would come into play. The old suggestion of Aristotle, of a father of thirty or more, and a mother not under twenty, would, in my opinion, tend to give you better brain results, and also, from my observation, better physiological results.

3. Is it your opinion that after the war the system of

limitation of births should be adopted?—It is being adopted increasingly every year, and I trust it will go on being adopted on a still increasing scale, but I do not wish to be understood to suggest any legal compulsion. If we kept within three or four, without any pedantic or hard-and-fast rule, I think it would meet the situation. Families from two to four would, it seems to me, meet the needs and maintain the population to the full limit of possible good life.

4. You think the population should be diminished in number and be increased in value?—I should not be sorry to contemplate such a future. I can conceive an ideal state much more easily in point of view of a reduced than of an increased population.

5. In regard to emigration, do you think there is any advantage in planting out our surplus population in the colonies?—If there is a surplus population; but is it desirable that a country should produce a considerable population that cannot get a decent living?

6. Is it a fact that the Australian colonies have limited births?—I think the birth-rate of Australia is the lowest of the Empire. Undoubtedly family limitation there has been most systematically practised, although there may not be limitation in some of the outlying districts.

7. Mgr. Brown. What argument can we put forward to a country like Japan, which might say, You have an enormous country unpopulated; why not let it go to people who wish to populate? The United States, for instance, has great congested areas, while there are great vacant tracts in Canada. In Russia there are vast tracts which could be made productive, but you have no intention of doing it?—Take the question of the Mother Country—the question of Japan as put to Australia might seem fairly telling, but Australia might answer that Japan was populated at a low level of moral and physical well-being, and that they did not propose to let Japan come in and lower the levels there. Put to ourselves, the answer to the question would be that the people of this country have hitherto always had an excess population. Emigration has gone on at a great rate since the limitation of the birth-rate has been practised, because it has been accompanied by a heavy fall in the death-rate. If you say Japan, or any other country, is entitled to say to Great Britain that either Great Britain must populate these vacant spaces or that Japan would do it, and if that would mean a burden upon them and the lowering of life conditions, I should say we must decline to enter into the competition.

8. Australia had very strong immigration laws in regard to skilled labour, and so on, and said that Australia should be kept for the Australians?—I consider that the case against the Australian Government is fairly strong, both from the home and the world's population point of view.

9. Is the standard of life and comfort so very high all through Australia?—I think not, but I have never held that the Australian Government were justified in carrying restriction to the extent they did. Any Government can say they decline to let their standards be lowered by allowing others on a lower standard to come in, but the Australian Government pushed that short-sightedly and excessively, and have restricted the development of Australia by its selfish application.

10. Some writers hold that there are physiological reasons largely responsible for the small birth-rate in Australia?—It would be desirable to have them explored.

11. Don't you think that the present war, with the vast untapped resources it has shown to be available, shows that the trade unions were right in saying there is enough to go round even without restriction of population?—My own feeling in regard to the war is that it has not revealed any highly optimistic state of things. What has been revealed is the necessity for the very careful economising of all resources that labour can exploit. I have been impressed, not so much by vast resources, as by the need of vast organisation to make the best of them.

12. DR. SULLIVAN. Is there any evidence showing the qualitative difference between earlier and later born children?—I cannot recall any systematic investigation; it would be quite desirable.

13. If it were found that there was considerable physiological disadvantage in the case of first-born children, that would be a strong case against birth control?—My point is not that first-born children are inferior, although I believe there is a good deal of evidence that first-born children—males, and perhaps females, males, at least—are apt to suffer at birth injury to the cranium more frequently than are later children.

14. My real question would be: At what age of first-birth do you get the best results?—Later-born children are the best, not because they are the second or third in the family, but because the parents are more mature.

15. Is there any statistical evidence as to the difference between children of large and of small families, in regard, say, to their contribution to crime?—I do not recall any evidence,

but an a priori argument would be easy. It would be difficult to get any scientific basis from pure statistics, because you would have to put on record for every criminal how many brothers and sisters he had, and also whether it was a family in which there were many births. There are frequently a large number of births even in small families.

16. DR. STEVENSON. Would you prefer the birth-rate to remain at its present level, or be restored to pre-war level, or to be still further reduced?—I rather anticipate that after the war there will happen what I believe has happened after most wars—a certain rise in the birth-rate as compared with the period immediately preceding the war. I can see no ground for urging it as desirable that there should be any increase.

17. The present rate is eighteen per thousand; in 1913 it was nineteen or twenty per thousand?—The present figure is caused by artificial limitation of birth due to the segregation of the sexes by the war. The sound inference is to follow the lines of pre-war experience, and make no attempt to raise the birth-rate, but always to keep before us the reasons which before the war led people to limit their families.

18. Is Australia not the portion of the Empire with about the highest birth-rate, considerably higher than our own?—If Australia has the highest birth-rate there was no need to appeal to us.

19. In regard to the bearing of the birth-rate question on the military situation, what do you think this country's policy ought to be if Germany restored and maintained its old birth-rate and Great Britain and France kept at their present level?—If the world remained on the old military level, if the German military system is not upset, other countries will also have to do so, and then it would be difficult to convince people that numbers did not count, but countries which practise brutal multiplication will not gain in the long run. A considerable section of the German proletariat are dead against this appeal to them to maintain numbers.

20. You told us the limitation of population did not lead to the weakening of a nation from a military point of view; to what do you attribute the relative inferiority of France as a military power at the beginning of the present century, compared with the beginning of the nineteenth century?—The Boer States were in a state of great inferiority compared with ourselves in the Boer War, although they had a very large birth-rate. A relatively large population in one

country, and a small population in another, does mean relative disadvantage to the smally populated country, but the country that limits its population from the point of view of comfort of the family would, in the end, be as strong as the country which increased its population from a point of view of military needs.

21. The relative inferiority of France as a military power at the present time is not due to deterioration of French manhood, but to inferiority in numbers now as compared with the beginning of the nineteenth century?—I should not say that Germany in the past has cultivated numbers in that respect. There was some regard to well-being even in Germany. I consider the military superiority of Germany was a good deal a matter of her larger population, which was due in part to her taking territory from France. Had Alsace-Lorraine not been taken from France, the disparity would have been less. I do not deny the commonsense fact that a population of 100,000,000, properly and thoroughly organised, is stronger for military purposes than a country of 50,000,000, but in the cultivation of mere numbers you must lose an element of strength. The fighting value per head in France is higher than in Germany, and much higher than in Russia, that is, as regards the power of protracted endurance. The nation with the largest numbers of all in Europe has made the smallest show under the long strain. I consider that a large population of a low level of intellectual life, comfort, education, etc., means a relatively lower military efficiency. In China you have a very high birth-rate and very low life-conditions; you could make a good army out of China, under right organisation, but the population of China as a whole could not be said to be of good military efficiency.

22. Dr. Routh. Do you think that the individual man and wife go into this question and limit their families from economic and military reasoning? What do the ordinary married couple limit their children to one, two or three for?—I should not say merely for economic reasons, but also for social—what I should call, in a very broad sense, moral reasons.

23. Could not you also call it selfish?—In a sense, but nothing can be more selfish than the mere gratification of instinct without regard to consequences. I agree there is a self-regarding element in the advocacy of limitation, but I do not think that it means in the end the maximum of selfishness. It is a stepping-stone to altruism. This self-regard of the father means regard for the happiness of his

wife, and also consideration for the life-conditions of his children.

24. You have stated that the super-maternity of a woman is disadvantageous to her well-being, but you have not alluded to the physical effects of restriction. It is well known that the result of artificial restriction produces a good deal of bad health in both father and mother, and a great deal of unrest. These trade unions who are largely restricting their families by artificial means—we have evidence of it in regard to the Amalgamated Society of Engineers—exhibit unrest, and it is rather remarkable that there is no trade union in England that shows greater unrest than that Society. Don't you think the unrest is simply due to the multiplication or congregation of individuals who are unsettled in their family life?—I can see no foundation for any suggestion of neurasthenic or other bad physiological results from restriction. I do not know how far it is implied that mere celibacy would have similar results.

25. What are your views as regards the endowment of maternity? You would rather not encourage endowment because it would encourage a higher birth-rate?—I should not be against any kind of provision that aimed at giving better life-conditions for life, once it came into the world, providing you were not in that way encouraging over-production of life. Anything that could give economic encouragement to the birth-rate in all probability would operate very disastrously in that way.

26. You have referred to the first child being inferior?—A large number of first-born children die at birth. Children should not be born in the case of young parents in the earliest years of the marriage. The birth of the first child should be postponed to a point at which both of them have learned better the arts of management and child-rearing.

27. MGR. BROWN. Are you prepared to advocate any legal restriction for the prevention of unfit people from marrying?—Theoretically I look forward to a world in which some restriction may be made legal, but at present I do not see my way to anything more than a strong moral appeal to such parents. I understand it has been proposed in the legislation of some States of the United States. When I was in the States and was told of the frequency of marriage between deaf and dumb people, I thought they should be prevented from bringing what would be inevitably deaf and dumb children into the world. But if you could be sure that deaf and dumb parents would avoid having such offspring, I can see no argument for preventing their marriage.

28. Miss Broome. It is not only deaf and dumb; there are many kinds of unfit persons?—As regards the prevention of marriage, I would like first to see a moral appeal to such unfit parents, and if that failed, I should be bound theoretically to contemplate some legal intervention to prevent the marriage of unfits.

29. There are some passed through our elementary schools who would not be persuaded by any moral persuasion; they are not mentally or physically fit?—In cases of mental unfitness I should be ready now to segregate them.

30. Don't you think the effect of the new Education Act will be to prevent juvenile labour being available so early or for so many hours as formerly, and that we shall consequently require more labour?—I should not hold that that is to be made good in the mere multiplication of labour; I look to the economy of labour. Juvenile labour going into the market, say, at fifteen will be more efficient than at thirteen, and at seventeen will be more efficient still.

31. Mrs. Clay. When two experts like Mr. Robertson and Dr. Stevenson do not agree in regard to the question of Australia, would it not be possible to ask Mr. Robertson if he would look more into the statistics, so that we may have his opinions at the next meeting, and know what he really believes?—I will do that with great pleasure.

32. On the one hand, you say they discourage immigration, and, on the other hand, it seems they are expecting immigration from us to enable their population to be kept at a proper ratio?—I did not say they were expecting it, but alluded to propaganda in this country, saying that it was the duty of the Mother Country to propagate for that purpose.

33. The Chairman. You are aware that Australia is hungrily asking us to emigrate men now?—Yes, and the answer to Australia would be that you have to consider your own birth-rate, and you cannot reasonably demand of the Mother Country the creation of bad life conditions if you yourselves have practices to prevent those conditions.

34. Have you acquainted yourself with the report of the Dominions Royal Commission, and with the work of Dr. E. C. Snow upon population and emigration?—I am afraid not.

35. They came to the conclusion that this country had no men to spare at all for emigration, even before the war?—The Colonies were for many of our people a sort of Eldorado. Emigration is the only way poor men can see other countries of the world and travel. The term "to spare" would require rather exact definition, and only in an ideal sense

would I assent to it. That is to say, that we could have made use of that labour if we had readjusted our social system, but as things were it was to spare, in the sense that a lot of labour was not getting good enough wages.

36. We have not yet mentioned food. I had hoped you would have addressed yourself to the modification of the Malthusian position, which might conceivably arise if it could be shown that we could produce in this country very much more food than we have hitherto done?—I have studied that both from the point of view of the world's food supply and the nation's food supply. As to the world's food supply, there are some very pessimistic views that the world was approaching a point when production could no longer keep pace with the population. As to the country's food production, I should assent to the proposition that it could be increased, but I see no likelihood of it being so rapid as to make any difference to the population.

37. The increase during the war has been immense, and we are well within sight of being self-supporting. We have raised the production of wheat from one-sixth approximately to five-sixths of our consumption, with a not greatly reduced consumption. We have sent enormous quantities to our soldiers and to our allies, France and Italy. We will send the figures to you?—I will add to my remarks on that head when adding to my remarks *re* Australia.

38. As regards Scotland, have you followed the recent figures of a decline in the birth-rate with a well-maintained death-rate and with a consequent drying up of emigration to our Colonies, where the Scotch stock has been priceless?—I will make a study of the figures.

When you have looked into the matter further, you might care to come and say something more to the Commission. What this Commission is concerned with is arriving at the facts and getting at the truth now for purposes of usefulness.

DR. STEVENSON. In 1895, the most remote year for which I have the figures, the birth-rate in Scotland was 30 and the death-rate 19·4; in 1914, the most recent year for which I have the figures, the birth-rate was 26·1 and the death-rate 15·5, so that in each case there has been a fall of 3·9 between the two years, the fall being equal in the birth-rate and the death-rate.

39. THE CHAIRMAN. Since the war the reduction in England has been very extraordinary, but Mr. Robertson prefers to say that the kind of figures that obtained before the war were the kind he would say were nearest to the

ideal?—There is a difficulty when you have a conviction that a still further reduction of the birth-rate would be beneficial. We would like to believe that the nation can maintain in the future in real good life conditions the population as at present. Public opinion was being educated before the war, knowledge was being spread, and the birth-rate was in consequence falling, and what I consider is desirable is that that knowledge should go on spreading up to the point at which you get the whole of the population actuated by the motives which hitherto only applied to the more prudent parts of the population. In some areas there is still an excessive birth-rate. I think there is something to be said for the contention that a high birth-rate in rural districts is not so bad as in towns, but even in rural districts it does not enhance moral and intellectual life. The desire for children is quite strong enough to resist any elimination of the rate.

40. MGR. BROWN. Do you think the average young people marry in order to have children?—No. While people marry for more elementary motives, it afterwards enters a great deal into the thoughts of a woman who desires children.

41. Is there any section of the community where restriction has been long enough in operation to say that it does not result in sterility, which has been asserted about certain districts in France?—I can see no evidence as to induced physical sterility.

42. THE CHAIRMAN. But the stock might end because it did not reproduce itself quickly?—I have no fear of that.

43. MGR. BROWN. Even on the hypothesis that people may marry young and defer conception to a later period in life, you do not feel that sterility might assert itself disastrously?—No.

44. THE CHAIRMAN. You said that the Malthusian remedy was, in your judgment, indispensable for the relief of the burdensome conditions of life. I take it that if the State thought it worth while to endow parenthood or to endow children, those conditions would be very greatly relieved?—While you might lessen the burden as regards individual parents, you would very speedily produce increased stringency of burden as regards society in general.

Statement of PRINCIPAL P. HEDWORTH FOULKES, Harper-Adams Agricultural College, Newport, Salop

At Dr. Reid's request, I have prepared the following brief evidence to support the contention that the production of

milk may be carried on under less close and confined conditions than are so often put forward as necessary for the housing of dairy cows. The practice in the Midlands is to bring in cattle from pastures and to house them in more or less confined quarters about the end of October. On fine days the cattle are turned out, but otherwise they are kept in more or less confined buildings the whole time. In order to ascertain the effect of keeping cattle out-of-doors beyond the usual time of year, trials were made for four years on our college herd by dividing the animals into two lots and keeping one lot under the ordinary practice of the district, bringing them in at night and turning them out on fine days only, and with a second lot, which were kept out-of-doors entirely night and day, and only brought in for milking. The first season's results were so contrary to ordinary opinion that trials were repeated for the following seasons. In each year of the trials there were extremes in the climatic conditions during the time the cows were kept out-of-doors. The rainfall varied considerably, and the temperature fell below freezing-point on each night for half the length of the trials, and on one occasion twenty-five degrees of frost were registered. The experiments extended up to the end of the year, and cows were then housed, owing to difficulties of management which had to be contended with. The following table gives the results of the four years' trials—

Year	Decrease in milk per head per week	Increase in butter fat	Increase in live weight per head
	lbs.	Per cent.	lbs.
1901 (5 weeks):			
Cows out . .	3·2	·77	6·0
Cows in . .	11·6	·31	1·5
1902 (4 weeks):			
Cows out . .	13·6	·3	10·9
Cows in . .	26·4	·4	2·8
1903 (5 weeks):			
Cows out . .	23	·52	8·0 (loss)
Cows in . .	22	·49	8·0 (loss)
1904 (4 weeks, 1st period):			
Cows out . .	14·8	·47	7·2
Cows in . .	15·6	·19	8·4
1904 (4 weeks, 2nd period):			
Cows out . .	7	·05	4·6
Cows in . .	7	·18	1·5

The results are decidedly in favour of leaving the animals out at pasture during the night, and from the fact that there was a greater increase in live weight when the animals were turned out, it was apparent that they did not suffer by the treatment. Observations were made on the animals on very cold nights, and although no shelters were available, they did not appear to seek shelter from the hedges to any appreciable extent. The quality of the milk is indicated by the percentage of butter fat present, and was in favour of the animals being kept out-of-doors. This practice of turning out cows has extended since the results of these experiments were published. During the past two years another series of experiments on milk production have been carried out on the college farm, to demonstrate the possibilities of milk production on arable land. It has been seriously contended that the ploughing up of so much grass-land will reduce the output of milk, and in order to demonstrate the soiling system, a herd of twelve cows has been maintained during the last two seasons upon forage crops cut and fed to the animals indoors. Under this system a larger number of cows can be kept per acre than when they are grazed in the open field. Our figures for last season briefly show that the best acre of arable land yielded 1035 gallons of milk, while the best acre of grazed land yielded 252·85 gallons, while the average yield per acre from the soiling crops was 499·2 gallons against 198·5 gallons from the grass-land. Although the dairy cows are housed entirely within doors, they are not in any sense cooped up, as the building is so constructed that the animals are practically in the open air, and the condition of the stock last winter was excellent. With careful management cows can be kept in perfect health under the stall-feeding system as well as if entirely out-of-doors.

I think I have stated pretty much the principal points I wanted to lay before you in my notes (given above). I went into this question when we experimented some years ago as to the production of milk under conditions which are rather unusual. The conditions usually existing for the production of milk in quantity, such as exist in town dairies, have a tendency to produce a condition of the animals which is rather against the best interests of the individual consuming that milk, and some years ago, when down in Buckinghamshire, I was struck with the fact that there were cows there which were being kept under conditions altogether contrary to the usually accepted idea. In 1901 I put into trial a herd of cows under conditions which they

had never existed in before, and I was so struck with the results that I continued the trials for over three years, and the figures in the table (p. 118) will perhaps explain to you what I mean when I say that our results were quite contrary to the ordinary accepted ideas. Our object was to ascertain whether it was possible that, by keeping the animals out at grass until late in the season, we were getting the animals into a really healthy condition, and we found by weighing them that we were not in any way telling against the health of the animals. The increase in the live weight per head is really greater in the case of animals kept out late into the season than in the case of those brought in and artificially protected from exposure. That is conclusive proof that the animals were not suffering. Further, the increase in butter fat shown by the analysis of the milk from the cows turned out and from those that were kept indoors and protected from extremes of cold and climatic conditions also proves that the cows were not suffering. Now from the condition of those cows I think I might generally conclude that the cows that were out-of-doors were producing the healthier milk. I am sorry I have not any figures to show the tubercle contents of the milk, if the milk was in any way tuberculous, but judging from observations, those animals that were out-of-doors were healthier than those indoors. These figures did, I believe, attract a good deal of attention at the time, and then the matter subsided, until a year or two ago, when we had a number of inquiries from medical officers as to the results we had obtained in these trials. Two years ago we started a series of trials upon what is known as the "soiling" of dairy cows, and it bears upon this question of the health of the animals, because cows which are kept in town dairies are all kept in close confinement, and it has been proved, I think I may say over and over again, that a large number of such closely confined cows are tuberculous. Some years ago I lived on a farm outside a large city, where a herd of dairy cows was kept under those conditions which generally exist in town dairies, although this happened to be two or three miles out of the city. The cows were fed almost entirely upon Italian rye grass and similar bulky green food, and such food as grains, treacle and meal, and the conditions were such as to produce a heavy flow of milk for the one season, and at the same time fed up the animals so that at the end of the season they were killed. A slaughtering order came out while I was on that farm, and the whole of the cows were slaughtered, and eighty-two per cent. of them were tuber-

culous. We have reduced to a considerable extent the number of tuberculous animals in our herds, but the conditions that exist in our town dairies are such as to encourage the disease. This "soiling" system is not entirely close confinement; I should say confinement is not necessary; and in the case of the herd of cows which we put under experiment we have a building where the animals are practically in as healthy surroundings as if out-of-doors. The building we have had to use is only a wooden structure, because we had no means of putting up a more elaborate building, and I think the results attained, as indicated in my précis (p. 118), show that the yield of milk has been really remarkable. I have a photograph of the building we have been using, and the lower one gives you an idea of the way in which the ventilation is carried on. The "soiling" system consists in feeding stock indoors instead of turning them out to graze on pastures—feeding them upon green or soiling crops.

1. DR. REID. You started these experiments at Government instigation?—Yes.

2. There is no doubt whatever that the farmers' tradition is entirely wrong, that they have to keep cattle in close confinement in order to get a milk supply?—Yes.

3. And the advantage of not doing so is that you get a healthier animal under cleaner conditions?—Yes.

4. In your opinion would it be practicable, from the ordinary farmer's point of view throughout the country, to entirely depart from old methods, and leave cows in the open with sheds to run in?—That is to a large extent dependent upon the building accommodation. Further north, up in Lancashire—you might draw a line from the Mersey to the Wash, and north of that line the cattle will not do so well out-of-doors after a certain time, but as regards south of that line the present prevalent idea, I think, is wrong, as demonstrated by us. You must have some cover to bring your animals in for artificial feeding and for milking. The weakly and diseased animal probably does suffer from exposure.

Statement of MR. JOHN DUNCAN WATSON, M.INST.C.E., F.R.San.I.

As General Manager to the Birmingham, Tame, and Rea District Drainage Board, I instituted periodical tuberculin tests to the Board Dairy Herd in 1908, at the instigation of Mr. John Malchin, F.R.C.V.S., Veterinary Surgeon to the city of Birmingham. These tests have

been applied at intervals of about six months from 1908 until now. The first test showed that sixty per cent. of the milch cows and twelve per cent. of the heifers were tuberculous, a result which was not surprising to those who had studied the question, but it was sufficiently alarming to induce the Drainage Board to adopt a scheme for the elimination of reactors. The scheme adopted is a modification of Bang's isolation method, and it has for its chief objects (1) rearing healthy calves, and (2) eradicating disease from the entire herd by segregating tuberculous from non-tuberculous animals. It was to give effect to this resolution that the herd was subjected to the tuberculin test every half-year. The percentage of reactions is given in the following table—

TABLE NO. 1

Date of Test	Percentage of Reactions
October 1908 [1]	36
April 23, 1909 [2]	25
April 15, 1910	23
December 22, 1910	30
July 25, 1911	25
February 8, 1912	0
August 8, 1912	5
March 1913	2
April 15, 1914 [3]	5
November 20, 1914	1
January 29, 1915	0
December 10, 1915	0
May 12, 1916	0
February 1917	0
May 18, 1917	0
December 7, 1917	0
June 8, 1918	0
January 15, 1919	0

Judging by the percentage of reactions at the periodical tests, little appears to have been done between May 1909 and September 1911, but notwithstanding appearances, this was the very time when the most effective work was accomplished. Reacting cows were allowed to yield their milk until nature reached her limit; they were then fattened and ultimately sold in accordance with the usual practice. As the cows belonged either to the Shorthorn or the Hereford breed, they were—when fat—highly appraised by the butchers, and loss due to cases of fattening prematurely may

[1] This is the average of both cows and heifers; cows *per se* produced sixty per cent. reactors, but only twelve per cent. of the heifers reacted.
[2] This included eighteen heifers recently added to the herd.
[3] This included sixteen heifers recently added to the herd.

be regarded as more apparent than real. Considering that the majority of those whose livelihood is made by cow-keeping do not breed their own cows, actual loss from selling cows in their prime need not be regarded as a serious factor, but if there were loss, it would, in my opinion, be counter-balanced by the tuberculin test revealing disease and giving early warning of probable deterioration of the animal. In other words, the application of the test enabled the farmer to fatten and sell before a cow, judged by clinical test, could be regarded as diseased. Heifer calves were taken from their mothers as soon as possible and reared under healthy conditions, which included giving them milk from healthy cows, keeping them as much as possible in the open air, and providing them with suitable food. Heifers were tested for tuberculosis at the age of eighteen months, and if they passed the test—as they generally did—they were sent to the bull. Table No. II shows the effect the tests had on the cows as indicated by yield of milk. It will be seen that after eleven tests there was a drop in the quantity. After five tests there was an increased yield, due to cows calving during the test week. It may be assumed that there is always a drop in the milk supply when the tuberculin test is applied to the herd. In 1908 the cows were disturbed for about a week; now the disturbance is limited to a period of rather less than three days. Bang's system requires carefulness and extra attention on the part of the farmer and cowmen, but it does not necessarily involve the owner of the herd in extra expense. If the milk supply has to be kept up under strict contract, the owner of the herd may lose money. In the Board's case the milk was sold to the Health Department of the Corporation of Birmingham, and there is no clause in the contract binding them to supply a specific quantity. An effort was made, however, to keep up the supply to a uniform quantity by purchasing cows which had just calved, but difficulty was found in buying animals guaranteed to be free of tuberculosis. Dealers were reluctant to take back reactors, as they did not find a ready sale in the neighbourhood, although they would have probably sold readily if they had never been tested. It appears to be a sound policy to rear calves, especially if their parents belong to a good milking strain. To carry out Bang's system it is an advantage to have a steading large enough to provide accommodation to isolate reactors, but similar results would probably be obtained by keeping animals out-of-doors, provided good shelter from the bitter blasts can be obtained in sheds or plantations.

TABLE NO. II

SHOWING THE EFFECT OF THE TUBERCULIN TEST ON THE YIELD OF MILK DURING THE WEEK OF THE TEST

Date of Test	Deceased Yield	Increased Yield	Remarks
	Per cent.	Per cent.	
May 21, 1908 .	9·6		Two cows calved April 20, and
April 23, 1909 .		3	one April 22.
April 15, 1910 .	4·1		
December 22, 1910	7·5		
July 21, 1911 .		1	One cow calved July 20.
February 8, 1912	2·2		
August 8, 1912 .	1·9		
March 21, 1913 .	4·7		
September 30, 1913	2		
April 15, 1914 .		·8	,, ,, April 18.
November 20, 1914		2·3	,, ,, November 22.
January 29, 1915	3		,, ,, December 10.
December 10, 1915	2·3		
May 12, 1916 .	3·7		
February 6, 1917	3·7		
December 7, 1917		7·7	,, ,, December 3.
			,, ,, December 10.

The general position is that by the elimination of cows suffering from tuberculous disease we have gradually been able to produce a perfectly healthy herd. The results have been manifold. We have had fewer visits from our veterinary surgeon; we have been able to keep our cows out-of-doors longer; and they have been able to withstand the cold better than formerly; and generally they have been much healthier than under the old conditions. I think I ought to have stated in the précis I wrote that we have bought no cows at all since 1911; that is to say, we have depended entirely upon the calves born on the farm for keeping up the strength of the herd. We have sold our bull calves, and in every case we have kept the young heifers. That leads me to say that the practice—and I have not commented upon this in the précis—of selling heifers to be fattened and sold as butchers' meat is highly objectionable. Some farmers buy heifers purposely, because they have the idea that they fatten better than bullocks. I am not prepared to say they are wrong in this view, but obviously they are destroying the young animals that ought to produce milk and reproduce their

kind. Reference has just been made to animals feeding naturally, and to keeping cows in town barns. Instead of stall-feeding and giving them meal, brewers' grains and food of that nature, the universal shortage of such food has obliged us to send our cows out to gain their own livelihood, and the results show that we have not obtained quite so much milk as we did when we fed them artificially. The figures have gone down from 2·5 gallons per head ten years ago to 1·9 gallons now. I will put in the table—

DAIRY HERD. YIELD OF MILK

AVERAGE FOR 1907, 1908, 1918

1907 Ordinary Herd		1908 Year of first test		1918 (Nine months)	
No. of Cows.	Av. yield in gals.	No. of Cows	Av. yield in gals.	No. of Cows.	Av. yield in gals.
78	2·45	61	2·39	40	1·63
80	2·30	58	2·51	40	1·67
77	2·53	63	2·45	33	1·78
66	2·54	66	2·52	27	2·07
65	2·54	60	2·52	30	2·06
62	2·42	53	2·60	28	2·08
63	2·27	58	2·56	27	1·89
64	2·32	56	2·56	26	1·80
64	2·33	52	2·53	24	2·02
60	2·37	45	2·51	25	2·03
65	2·37	43	2·49	25	1·71
63	2·35	40	2·49	23	1·67
	12)28·79		12)30·13		12)22·41
	Average 2·4		Average 2·5		Average 1·87

I wish to guard against any idea of the reduction of the milk supply being due to the process of eliminating tuberculous disease from towns. It has nothing to do with it; it is entirely due to the fact that foodstuffs are very severely restricted at the present time. One other disadvantage brought to my notice quite recently by a large farmer is that cows at the present moment are being bought in at £60 per head, whereas by our method they are not costing us any more than the keep of the young calves.

1. DR. REID. You have shown us that it is quite practicable in the case of a herd of cattle intelligently managed to

eliminate tuberculosis entirely?—Yes, and without any great expense.

2. Looked at from the point of view of the small milk-seller with a few cows, he could not do what you do to arrive at the same result. Have you any suggestion to make as to how it should be done for him?—I think there would be some difficulty in the case of a very small farm, but I do not think it is an insuperable difficulty at all. It would restrict him in this way, that he could not undertake to contract to supply a given quantity of milk. He would have to make up his mind to sell only the quantity which his cows gave to him in the natural way.

3. Would it not be that the Government would ensure him being placed in the position of purchasing non-tuberculous cows?—Yes, but I think our system is better than being dependent on buying cows. In practice there is great difficulty in getting a dealer to sell non-tuberculous animals.

4. Supposing there was a system of a small subsidy and the Government ordained that tuberculous cows should, after a certain year, be eliminated, and that only non-tuberculous cows should be sold, would that be quite practicable?—It would, and I think not at a great cost.

5. Each farmer should submit his cows to be tested periodically with the intention of having them slaughtered immediately any tuberculosis was discovered?—That is what I would suggest, and that could be worked either through counties or cities.

6. THE CHAIRMAN. It would be a very proper thing for the coming Ministry of Health to undertake this control of tuberculosis in cows as part of its duty?—Yes, I think it would be quite within the limit of practicability, and there is no time more favourable than the present, because animals are fetching up to £60, which is three times the price of twelve years ago.

EIGHTH DAY

Monday, October 28, 1918

MR. J. A. HOBSON, M.A., in the Chair

Statement of MAJOR LEONARD DARWIN

I AM the President of the Eugenics Education Society, but I am giving my evidence as an individual and not as

spokesman for that Society; and if I do speak mainly on the racial point, it is merely because that is the question I have studied most. The effects of State expenditure in order to ease the strain of family life may be divided under two headings—the effects on the mother and the child, and the effects on the future output of children. As to the first heading, I do not know that my opinion is worth giving. The first point I would like to mention is that we naturally wish to inquire whether expenditure on mother and child, besides doing immediate good, will also produce beneficial racial effects. On this point scientific opinion has been both diverse and changeable. A few years ago scientific men would unhesitatingly have said that it would produce no racial effects in the future; but the pendulum is now swinging a little in the other direction, and many are coming to think that environment may produce heritable effects. In all probability environmental conditions do in a limited number of cases produce heritable effects, but we know extremely little as to the effects of any particular environmental changes, and there are strong reasons for believing that these changes only produce beneficial or harmful heritable effects after many generations. Therefore the necessity for State expenditure on mother and child must be judged by its other effects. This is not to me a pessimistic belief, because we are all limited by our natural qualities, and with racial advancement these limitations would, in a measure, be removed. The science of heredity opens out possibilities of progress which now seem closed to us. Many eugenists have been accused of advocating the murder of children for the sake of killing off the unfit. That is entirely untrue. We condemn murder exactly on the same grounds as everybody else. Moreover, we see clearly that if we are to do any good to the race of the future it will demand serious sacrifices at the present time, and we shall never get these sacrifices made if we teach the present generation to be careless as to the welfare of their neighbours. I look upon eugenic progress as intimately wrapped up with moral progress. Science teaches us that men are the result of the environments to which they have been exposed acting on their inborn natures, and that the inborn natures of men are very different. If this is true, it follows as an inevitable consequence that the inhabitants of good homes are on the whole naturally superior to the dwellers in bad homes, because their good innate qualities will have made for the production of good homes. This is true whatever distinction we like to draw between good and bad homes. If

this is the case, it follows also as an inevitable conclusion that to increase the number of children born in good homes or to decrease the number of children born in bad homes would make for racial progress. If both heredity and environment count in the final product of the man, with regard to any selection of human beings, such as the selection into good homes, you cannot entirely put aside heredity, and therefore the inhabitants of good homes must be somewhat superior to inhabitants of bad homes in their natural qualities. And this leads to the point I want to make more than any other point. I know that there are a good many social reformers who disbelieve in heredity altogether, or think it has but little effect, and should therefore be neglected. But nevertheless they ought to be anxious to introduce very much the same reforms as we desire. We all of us see that bad environments act as carriers of evil influences from one generation to another, by tradition and also by physical effects. Bad houses not only do harm to-day, but as long as they stand, and therefore we all want to destroy this chain of evil effects by destroying these bad surroundings, mental and physical. But if we look facts in the face, we see that this is very difficult to do, and social reformers ought to welcome any auxiliary method of bringing about the desired result. Such a method is open to them, that is, by diminishing the number of children produced in bad homes, and by increasing the number produced in good homes. If this could be done, bad traditions would be less handed on and good traditions would be more handed on, and this desirable result ought to be striven for even by those who put aside natural inheritance altogether. The great difficulty is, of course, how this change in the output of children should be effected. The economic reforms in connection with parenthood which are put forward with the object of preserving child-life also often increase the output of children, because the strain of family life is thus diminished. Anything that diminishes the strain of family life also tends to increase the future output of children, because, in consequence, marriages take place earlier in life, and artificial limitation is less practised. What we should all like to do, if possible, would be to break this chain of evil influences by destroying the existing bad environments, and there seem to be, generally speaking, only two ways of doing that. One way is by something of the nature of outdoor relief. If any very large increase of outdoor relief took place, or anything equivalent to it, then the inevitable result would be a revival of all the old evils we had in England

before the reform of the Poor Law. Moreover, nothing in the way of outdoor relief would check the transfer of bad traditions from one generation to another. It would not stop those traditions which make for drink or idleness or inefficiency. But the point I want to insist on is that outdoor relief, in so far as it was given to the worst homes, would tend to increase the fertility of their inhabitants and thus do racial harm. Another way of endeavouring to meet these evils would be by institutional treatment. But that again would probably be ineffective from the racial point of view; for it would hardly be possible thus to lessen fertility. Those placed in institutions would be given their liberty from time to time, and their fertility might be increased by their being made more healthy. Therefore it seems that both types of treatment, institutional and outdoor relief, are harmful from the racial point of view; for both tend to increase fertility. We are on the horns of a dilemma. We have either to refuse to give help in bad homes, thus letting the bad conditions continue, or we have to give help in such a way as to tend to increase fertility in bad homes. In almost all reforms we have to choose between evils, and the conclusion I here come to is that it is necessary to refuse to give assistance in homes below a certain standard of decency. In that way least harm on the whole will be done. If we refuse to give help to homes below a certain standard of decency we shall put a stigma on those conditions in a way which will be both educative and preventative. We must harden our hearts to a certain extent, and refuse to give assistance in homes below a certain standard of decency, institutional treatment being always available as an alternative, with parenthood prohibited. You ask me how it is possible to try to promote parenthood in good homes and check it in bad homes. This must mainly be a moral campaign. As to the output of children in good homes, we must endeavour to show people that it is their duty, if they are healthy and fit, not to unduly limit their families.

1. THE CHAIRMAN. You base what is meant by good homes and bad homes, not upon degree of poverty, but upon other factors?—Yes. Overcrowding would be one of the main factors, and culpability as well, but I don't want to lay down any definition of bad or good homes. I think there should be variety in all these things, so that every form of good home should be included.

2. A good deal of attention has been directed to certain types of the working-class people not getting good homes, good in the sense of avoiding overcrowding. It has been

put before us that many owners or lessees of houses are forcing overcrowding upon certain of the poorer classes by refusing to let houses to people with growing families, irrespective of the goodness or badness of the type of those people?—At first, if there is to be any standard of this sort, it must be a low standard. However poor the good home was, you would see the signs of goodness in it.

3. Do you think that there might be general education of public opinion which would preclude people from marrying persons who were not capable, according to such evidence as was available, of producing healthy children, and so you would get a certain effect from environment which would operate upon racial selection?—I quite agree. I think you would get marked effects if in education racial effects were to be held in view.

4. Do you think improved hygiene and feeding of parents tends to produce a better child at the beginning?—That is a medical question, but I imagine it does do so. It may not produce truly heritable effects.

5. You mean that the child would not be likely to transmit to the next generation any superiorities thus acquired?—That is the view, I believe, of the scientific world of to-day, but I do not say I hold it myself; I think the question is still in doubt.

6. Who are the people who are going to say that a particular home is below or above a certain standard? I take it you suggest that State officials would not be so competent to apply the test of a good home as private charitable bodies, such as the Charitable Organisation Society, would?—My experience is not wide enough to make my opinion of any value. Whoever is trusted to give assistance, must also decide whether each particular home ought to be helped. As to State money, the decision must be in the hands of State officials; but I would like to leave a good deal of this assistance to private charity.

7. In your fuller statement you say: "It is a melancholy fact that progress in civilisation constantly brings dysgenic influences in its train, and this may be the reason why ancient civilisations have often died out." As civilisation advances, in your opinion, is it pursuing a policy that may bring dysgenic influences in its train?—In our slums, as far as I can judge, we have made great advances, and this must have been due to social causes and not to racial effects. But it is possible that certain civilising influences which are preserving the lives of the unfit are also slowly tending to produce racial decline.

8. We have a good deal of evidence before the Commission to show that better homes, which command a higher standard of comfort, are less productive in children than the worse homes. Might it not follow that any public conduct which improved the character of the worst homes, instead of making them more prolific, would make them less prolific?—I have no doubt that the birth-rate does fall with an increase in wealth, but I doubt if the artificial transfer of wealth to any class would have that effect. One has to analyse the causes of the fall in the birth-rate very carefully. Directly you get any class owning property, it results in a fall in the birth-rate, because there is a choice of using wealth either in setting up homes, or in obtaining certain advantages or pleasures which compete with marriage. If the increased wealth of the poorer classes was of such a type as not to open out before them new methods of spending their own money, it would not affect the birth-rate. To give open spaces or free education, or many other such advantages as we ought to give, would not, I think, tend to lower the birth-rate.

9. You think it would increase the actual population?—Yes.

10. Dr. Scharlieb. Under the reconstruction which is to follow the war, and now that women are going into Parliament, do you not think there will be a gradual levelling upwards out of these bad homes? Is it not within the bounds of hope that within the next fifty years we shall be a very different people—that there will be more and sounder education, higher wages, and better conditions of life in all these five hundred thousand new houses we hear are coming?—I have great hopes; and everything in that direction will be eugenic. But however optimistic we are, we have to keep in view the racial side of the question.

11. Dr. Schofield. What is the difference between eugenic progress and moral progress?—By eugenic progress I mean improvement in the actual inborn qualities of the race, physical, mental and moral. You might have moral progress through education at a time when there was no racial progress.

12. Do you consider environment is a stronger force than heredity, or weaker?—I have never been able to give a clear meaning to that sort of question. Environment may counteract heredity very greatly.

13. Would you say that better homes, as distinguished from bad homes, are generally more sterile; that they begin by having fewer children, and that that is one reason why

they are better homes?—If there is a small family it of course eases the strain, and makes it easier to bring up children properly. The question of actual physiological sterility must be considered, because for some reasons it is possible that the wealthy are more sterile naturally; but of this I have never been able to get any proof.

14. To distinguish between good and bad homes would itself be a dangerous proceeding, because we should not really know which were which?—Yes, but you cannot advance unless you face some danger.

15. The Duchess of Marlborough. Your suggestion would create rather an artificial standard for giving relief?—There is difficulty in setting up any standard, but it is an idea we ought to keep in mind.

16. Mrs. Clay. Do I understand that you are in favour of many of these cases being treated by private charity, where the knowledge would be likely to be more exact as to what constituted good homes or bad homes?—I have not sufficient knowledge to draw an effective comparison between public and private expenditure. If the money comes from private charity, I suppose the private administrators must be the people to judge when it should be given and when not.

17. Do you think increase in voluntary charities would tend to solve the difficulty more than general State-applied assistance, something like the Elberfeld scheme?—I think greater public attention to all these questions would be most helpful, because there is a shortage of people willing to give time and attention to them. If you are to decide as to the character of a home, it can only be done by persons willing to give great attention to the subject. Good can be done more by personal attention than by money.

18. Miss Broome. Don't you think we might do more to educate the mothers before they become mothers, educate them to see that the greatest claim of the child is on the parent rather than on the State? We must take internal comfort and cleanliness of the home, and the clothing and the feeding of the children, into account, and the persons to give the most eloquent evidence on these points would be the health visitors and the teachers. Money is not everything; it is the way the money is managed?—There is no necessity for poor homes to be bad homes, but there is often necessity for a bad home to be a poor home. It is of vital importance that everything should be done to increase the sense of parental responsibility. There is no degree of poverty which would prevent a visitor from being able to say that this is a good home in spite of its poverty.

19. Since better wages have been paid, and since the restricted hours for drinking, we have found that the children are better clothed and better fed, and that the mothers are getting a better standard. Do you think we should try to keep these things after the war?—Yes, as far as possible; but I have not the advantage of much personal contact with the poor.

20. DR. MARIE STOPES. May I suggest a very simple solution in regard to the hopelessly bad cases, bad through inherent disease, or drunkenness, or character? A perfectly simple way would be the sterilisation of the parent?—If I give an opinion on that matter it must be a personal opinion and have nothing to do with my Society. I am inclined to think we shall be driven to some form of sterilisation as the only possible way of dealing with this question; but we should want to know a great deal more than we do now before we can move along that path. We should want to be quite sure of two things: first, that sterilisation does not affect the character of the sterilised person, and secondly, that it does not affect the health of the child that might be born if sterilisation was a failure.

21. Experiments have been made on a large scale in some of the States of America and in Switzerland, and it has not had a bad effect upon the parents. Does it matter if it affects the man? Is it not better that he should be slightly affected rather than that his wife should have children?—Perhaps it may be. I am prepared to move in that direction.

22. LADY RHONDDA. You suggest that people whose homes are not up to a certain standard should be allowed to go to institutions, workhouses, etc.?—We are on the horns of a dilemma, and that would often be the best method. Whether public opinion is ripe for it yet in all cases, I doubt.

23. DR. REID. Would you not treat overcrowding as a matter of wages and compulsion, namely, that families ought to have sufficient wages and live in proper houses? If they do not elect to live in proper houses they should be compelled to do so. Many families with large wages, chain-makers and iron-workers, getting £5 or £6 a week, live in horrible conditions?—They should not be allowed to do so.

24. The houses may be quite suitable for a small family, but unsuitable for a large family?—I should like to see the pay of State officials depend to a certain extent upon the size of the family. I think that would help in such cases to get over the very real difficulty about equal pay for men

and women; but I can see great difficulty in introducing it into commercial and industrial life.

25. There are certain people you cannot control anywhere. Have you considered the suggestion that colonies should be formed where people should be compelled to live until they are conducting themselves properly?—Labour Colonies?

26. No. You would not interfere with their work, but they should live under certain conditions, and in certain places under certain restrictions, until such time as they can demonstrate that they are sufficiently decent people to live normally?—Would it not be something rather similar to a Labour Colony? I should be prepared to move far in that direction, but I have had no experience of Labour Colonies.

27. With reference to Infant Welfare work, there is a view as to whether it is worth while to do much, having regard to the possibility that you are encouraging the survival of weaklings to the detriment of the coming race?—I think we have to look to the health of the child, because if we deliberately neglect to do so for the sake of increasing the death-rate, it comes very near to murder, and we cannot hope for moral progress if we advocate murder.

THE CHAIRMAN. Miss Philip has been good enough to suggest that she should expand a little the four points down in her précis.

Statement of MISS A. G. PHILIP, Director of Maternity Subsection, Ministry of Munitions

The problem of the pregnant woman and the young mother in industry is not a new one, and I hope you will forgive me if I am compelled to repeat certain facts which must be quite familiar to you. In the Ministry of Munitions we have been forced to consider this problem from a very special angle, and this special angle has thrown into very strong relief facts which have existed for some time, but the significance of which has not perhaps been wholly recognised. For the past half-century there has been a steady increase in the number of women in industry. What the war has done is to accelerate that tendency and to force it to a logical conclusion. At the beginning of the war, when the fate of the nation depended entirely on the production of munitions, it was very natural that the question of output should have outweighed all other considerations. It was natural, also, that only strong and healthy women should have been accepted in munition factories. Work in munition

factories is for the most part heavy, and it did not occur to anybody as being anything but the simplest and most humane arrangement to accept for this work only strong and fit women in normal health, and to dismiss any woman who was found to be in a state of pregnancy. To the women of the industrial classes munition work was much the best-paid work available: no other work could compare with it from the point of view of money. Beside that fact you had the fact that never had it been so necessary for women to make money, even those women who had husbands behind them. If you put these two facts together, you will see at once how very dangerous it was to exclude pregnant women on account of their pregnancy from munition work. What happened was this: A woman who had, perhaps, several young children to support, viewed with horror the prospect of pregnancy, knowing that as soon as her condition was discovered she would have to leave the factory and seek other work. For the married woman with a husband to work for her that was not such a serious consideration, but for the woman entirely dependent on her own exertions it was disastrous, because if she was dismissed from her work at the fourth or fifth month of pregnancy, she had little hope of being taken on in any other factory, and apart from factory work there was little available for her, and what little there was was usually hard and very unsuitable for her. In these circumstances it was inevitable that the woman should conceal her pregnancy as long as possible, and in many cases endeavour to get rid of it. This danger was early realised on the other side of the Channel, and was officially recognised in January 1917, when the French Minister of Munitions issued a circular to the heads of all munition factories pointing out this very danger in great detail, and explaining what the munition employer must do to avoid it. Meanwhile, the factory doctors and supervisors were not going to wait for a lead from the Government. They were doing their best to adjust things in their own factories in such a way as to enable the woman to remain at work without danger to her condition up to within a week or two of confinement. This involved a system of grading the work, and passing the woman from heavy work to medium at the fourth month, and from medium to light work at the seventh month. The first result of this system was that the woman notified her pregnancy instead of concealing it. This had the advantage of avoiding many women leaving the factory for unexplained reasons, and causing disorganisation of the work which was not in the

least necessary. It had the second advantage of retaining in the factory trained workers and maintaining their health and efficiency. Meanwhile, though individual factories were making efforts to rise to the responsibilities of the position, there was no official recognition of these responsibilities. The problem of maternity in connection with munition workers was first officially recognised in the autumn of 1916, when the Ministry of Munitions was empowered to make grants in aid of crêches where the children of munition workers could be looked after by day or night. Since then about forty crêches have been established with the help of those grants, and have been of great assistance in solving the post-natal part of the problem. No further action was taken by the Government until April 1918. At that time, upon the representation of the Ministry of Munitions, the Treasury was induced to set aside a sum of money for the purpose of providing accommodation for munition workers at the time of confinement and for the pre-natal and post-natal periods. That was a great step, but it still gave the Ministry no power to touch conditions inside the factory. Our work in the past six months has consisted of administering that money, and it is in the course of that administration that we have come to realise fully how ineffectual our work must be as long as it is incomplete, and remains outside the factory, without touching the actual factory conditions during the pre-natal period. Take as a concrete example Coventry, which has at the present moment, in addition to its normal population, twenty-five thousand imported women and girls working on munitions. These women and girls must live in lodgings and hostels, and under conditions which make it entirely impossible for them to have their confinements at home. One of our first duties was, therefore, to establish in Coventry a place where munition workers could be confined. Coventry had never had, even in normal conditions, enough accommodation for maternity cases. There were a number of beds at the workhouse, and there were six maternity beds in connection with the Dunsmore crêche, and that was all. We have succeeded in getting permission to start a maternity home in Coventry, but, while we can provide accommodation for the woman's confinement, we are not empowered to maintain her. She is expected to pay a reasonable fee while in the home. If the factory does its duty as we hope it will see its duty in the near future, and keeps the woman upon suitable work, instead of dismissing her at the end of the fourth or fifth month, there is no particular problem to face.

The woman is going on earning up to the time of confinement; she has fairly good wages, and reaches the time of confinement with some money in hand, and is able to take advantage of the accommodation which we are able to supply. But there is a gap in the argument. We have no power to enforce that munition factories should keep on the women. We have no power to suggest that it is a reasonable thing for them to do at the present moment. Again, we are able to provide accommodation for the post-natal period, and we are hoping to start hostels where the mother can live with her baby, and where the child will receive every care while the mother is at work in the factory. But in these hostels, as in the homes for confinement, the mother is expected to pay a reasonable sum for herself and her child. It is consequently necessary for her to return to her work in the factory. Nor have we as yet any legislation such as they have in France for providing for breast-feeding in the factory. So long as we have no power to adapt the conditions inside the factory to suit pregnant women and nursing mothers, our work must remain incomplete and unsatisfactory. The creation of homes and hostels, which we have been busy over for the past six months, is not a problem which belongs properly to industry; it is a problem which, in the ordinary course of events, belongs to the general problem of housing, and would come under the Local Government Board. The part of the maternity problem which does belong to industry, and which cannot be dissociated from it, is the adapting of the arrangements inside the factory to enable the woman to continue on light work up to the time of confinement, and to enable her to breast-feed her baby without undue strain. We have made great efforts during the past six months to arouse in all factory employers a sense of their responsibilities in this matter, but you all know how ineffectual such efforts must remain as long as we cannot give any definite lead from headquarters. Meanwhile, the most enlightened factories have not waited for a definite lead. Tentative industrial experiments have been proceeding all over the country, and there are two of these experiments which I should like to call your attention to, because they have been most conspicuously successful. The first one was published in the *Lancet* on September 17. It is the experiment which Dr. Mary Deacon undertook in the National Amatol factory at Aintree. Dr. Deacon did not waste time asking herself whether, in an ideal state of things, it was wise to allow pregnant women to work in munition factories. She faced the problem from the stand-

point of existing conditions, and sought an immediate practical solution. Here, she said to herself, are women in our factories about to become mothers. What do they most need? The answer was that they needed ease of mind, regular exercise, and plenty of good food; and taking the problem from that point of view, Dr. Deacon came to the conclusion that the only place they could get these things was in the factory. She thereupon made up her mind to arrange the factory conditions accordingly. Her factory is one where the work is nearly all hard, and yet she succeeded in grading it into heavy, medium, and light, and she succeeded in getting her factory manager to agree to transfer women upon her recommendation to medium work, and finally to light work. She has been carrying on this experiment for eighteen months now. She has kept very careful records, and the conclusions she has come to all go to show that the women have benefited by remaining in the factory. The scheme is still incomplete. For example, Dr. Deacon has not yet been able to provide for the breast-feeding period. She has only begun to think how she can round off her scheme in that direction. But in the other scheme I want to bring before you, the breast-feeding element is much more simple, and much more a natural development of the scheme than it will be in the case of Dr. Deacon's scheme. The scheme I am referring to is one started by the three National Ordnance factories at Leeds. It starts from the same point of view—that it is unwise to dismiss a woman, dependent upon her earnings, at the fourth month of pregnancy, and that it is the duty of the factory to provide suitable work for her up to a week or two of confinement. The three factories combined. One happened to have a certain amount of gauging work—light work, which is done sitting down. All the pregnant women in the three factories were put in the gauging shop at five months. For the remaining months a central sewing depot was established in a small building at the entrance to one of the three factories. All these factories have protective clothing for their women—overalls, caps, waterproof aprons, and gloves, and this protective clothing is difficult to get, and very dear. It was found possible to produce all this clothing at a low cost by concentrating the labour of these women in that department. The experiment has now been in existence for six months, and it is being watched with the greatest interest by all of us, because it appears to offer such a simple solution of a very difficult part of the problem. One surprising aspect of the experiment is that it has turned out

a financial success. The central sewing depot is able to produce this protective clothing at a cheaper rate than it could be produced in the ordinary way of trade, and that in spite of the fact that the women work short hours, suitable to their condition, and have to be taught the job from the start. In spite of all these drawbacks the depot is paying. As soon as the women realised that it was to their advantage to declare their pregnancy, very many more pregnancies were discovered in the factory than were ever suspected before, with the result that the original accommodation turned out to be very much too small. When they get a building large enough to allow for extension the scheme will be able to include the breast-feeding period. After the birth the women will go back to the sewing depot, where a breast-feeding nursery will be arranged, and the mother will continue upon this light work until the child can be safely weaned. She will then go back to the factory to light work for a little, and eventually arrive back to her original factory work, perhaps at the end of the first year of the child's life, when the child can be transferred to the ordinary crêche. Both these experiments tend to show how important it is that any arrangements for this period of pregnancy and of breast-feeding should emanate from the factory itself. The factory must see that it is necessary to evolve some such channel through which the woman can pass out from, and back to, her original work. From our experiments it is clear that if industry is going to accept women it must accept them as women, and must make full and adequate provision for the maternal function. From whatever point the nation decides finally to approach this question of maternity, the experience of the war in factories has shown that at least a possible solution may be got by approaching it from the industrial side.

1. Miss Broome. Are you advocating that married women should be employed in factories after the war is over?—That is a question we were not called upon to decide.

2. Mrs. Runciman. Were they legitimate births, or illegitimate births, or both?—Both.

3. Do you know the proportion?—There are no statistics; it varied very much in different parts of the country.

4. What proportion of the total women workers were found to require the arrangement?—That varied extraordinarily. When we first faced the problem in the spring, we were surprised to find the numbers so small. This was largely due to the women concealing their condition. Special statistics

may be got in Dr. Deacon's report, but there are no general statistics.

5. THE CHAIRMAN. You say the danger of excluding these women was to the woman? Was there a danger even if her services could be replaced by another woman?—The danger to the woman was that she had no means of support when dismissed from the factory. This drove her to conceal her pregnancy or attempt to get rid of it.

6. MRS. RUNCIMAN. Were a large number unmarried?—A large number were, but there were married women also who found themselves in need of the money very much.

7. Was there always a crêche to put the child into when the mother returned to the factory?—We tried to provide a crêche wherever the need was large enough in a particular area.

8. MRS. CLAY. Are the married women and the unmarried women all treated on the same basis?—Exactly. In Leeds, when I was there about a month ago, there were sixteen pregnant women in the pre-maternity depot. Three of them were unmarried, and I asked the superintendent if she had had any difficulty. She said it was the married women themselves who had voted for the inclusion of the unmarried women, and they were particularly kind and nice to them.

9. Do you expect to see eventually any effect in the increased pregnancies because of the comforts which you can ensure for the women, whether the cases are legitimate or illegitimate?—You mean that the fact that they are able to remain and are making money will encourage them to have further children?

10. Yes?—I think very likely, but there has not been time for anything of that sort to show itself.

11. THE CHAIRMAN. Are you able to say how it will affect the post-war situation?—No.

12. MISS BROOME. Will you keep married women while unmarried women are wanting posts? If a married woman's husband is earning a living wage, is it not her duty to be at home? If she can afford to do so, the woman will probably prefer to stay at home.

13. DR. REID. Were the crêches self-supporting?—No. The Ministry of Munitions grant seventy-five per cent. of the cost of providing them. The mother is expected to pay a certain sum, I think from sixpence to eightpence. If you take the total maintenance cost as two and sixpence, and if the mother pays eightpence, that leaves one and tenpence, and we are empowered to pay half of that. That is to say,

we pay half the cost of maintenance after the mother's contribution is deducted; the remainder is paid by local effort of any sort.

14. Do you find that these crêches conduce to the spreading of infectious disease, such as whooping cough and measles? —I do not think that the consensus of evidence can be said to prove that. There have been individual cases of epidemics, but these have not been so common as to militate against the desirability of having crêches.

15. Have you any statistics with regard to the miscarriage rate and the still-birth rate?—I am afraid not, because it is only within the last six months that the problem has been recognised.

16. MISS BROOME. How long were they out of the factory before birth and after birth?—In the Leeds scheme, with the sewing depot, there is no reason why they should not go on until a late stage. They have every comfort and medical care, and the hospital is only just round the corner. The post-natal part of the Leeds scheme is only just beginning. There is a factory law that women must not be taken on in a factory until four weeks after the birth of her child; nothing has been done to interfere with that.

NINTH DAY

Monday, November 11, 1918

Dr. C. W. SALEEBY, F.R.S.Ed., in the Chair

Statement by SIR ARTHUR CONAN DOYLE

THE question of separations has a direct bearing upon national increase, as well as upon national morality. The correct numbers of separated couples cannot be exactly computed, but apart from the quarter of a million or so who have been separated in courts during these years, there are 60,000 married lunatics, each of whom represents a separated partner, and there are the great number of people who have been separated by private deed, or private agreement without legal deed. I do not think the numbers will ever be obtainable, but there can hardly be any of us who do not know some couple in that plight, and the total number is really very large. These latter are the most valuable class viewed as potential parents, as they are those who have too much self-respect to expose their affairs in public,

and are, on an average, of a higher type than those who apply for legal relief. The number has been placed at a million, but I think that that must be an exaggeration; I think half a million would perhaps be a moderate estimate. It can not be less than half a million, and I will take this figure as the basis of calculation. It was stated before the Divorce Commission that fifty per cent. of divorced people re-marry. It is reasonable, therefore, to conclude that fifty per cent. of those at present separated would also re-marry if facilities for divorce were obtainable. We should have, therefore, a quarter of a million re-married people. Supposing that each couple is credited with the average family of three, we have an actual addition within a few years of 750,000 to the population, with all the additional increase therefrom in the future. It is, therefore, no exaggeration, I think, to say that within a generation or so the ravages of the war could be made up from this source alone. It is also a fair argument to say that the immoral unions which are contracted between many of these separated people familiarises the public mind with the idea of cohabitation without marriage, and therefore lessens the respect for that institution. The more such unions increase, the lower is the birth-rate, since there is either prevention of children or else the children are illegitimate, and subject to the heavy and disgraceful mortality which goes with that condition—a mortality which I think is just double the ordinary.

1. DR. SCHOFIELD. Is the "million" you speak of couples or people?—People.

2. MGR. BROWN. First of all as to the statistical part. I suppose you would have to deduct from these figures the women who are beyond the age of fertility? You rather assume that all these people, if they re-married, might have children?—I have all through taken conservative figures, so I hope there is some margin of allowance there.

3. If you take the asylum figures, a great many are people well on in life?—Undoubtedly.

4. And if you have a lunatic man over fifty, it is quite likely that his wife may be beyond child-bearing age, and she could not add to the population. I think if you get the divorce figures you will find that they are mainly of people within the age of fertility, whereas people who separate without divorce in many cases do it later in life, and it therefore seems that you would not in all cases get children from the setting free of these people to re-marry?—That is so.

5. You would admit that there would have to be some considerable deduction from these figures on that account?—

The figures are so conservative that I hoped, perhaps, that might make up for the deduction. Undoubtedly what you say is true.

6. Do you think it is established that the increase of legal separations or divorces will make for an increase in the number of children? I rather base my question upon figures given in the case of New Hampshire, an American State, where the causes of divorce were made exceedingly wide, and where statistics show that the number of children per union steadily declined as the number of divorces went up in the State?—That is not quite on all fours with separation.

7. I thought you meant that people who now separate and do not mean to come together again, and who are debarred from getting relief from the State now, should be given relief in another way?—Yes, in the hope that they will re-marry and settle with families.

8. The New Hampshire figures rather seem to strike out your hope of getting more children?—In New Hampshire a couple breaks itself and re-forms into another couple; but here we have separated people who are absolutely sterile.

9. Your hope is to make our conditions approximate the New Hampshire conditions?—I take it we are not talking about divorce, but about separation, and I want separated people to be allowed to re-marry: at present they are absolutely sterile. In your New Hampshire illustration they were already married; they simply divorce and re-marry, and I think that is quite a different state of things, because the married people might have children in any case, but the separated people are absolutely sterile. Separated people should make out a case before a judge before they re-marry. I am here as President of the Divorce Law Reform Society, and I have not heard any proposal there that it should be free. What we advocate is a better and stronger law that shall prevent marriage falling into disrepute.

10. You hold that marriage is a purely terminable contract?—When one side breaks the contract, the other side has the right to be free.

11. It is not a contract as between two parties alone; the State is brought into it?—The State is brought in to see fair play.

12. If there is no sanction but human sanction for marriage, why should the State interfere at all?—It should do so; otherwise there would be chaos.

13. Why should not people agree to separate if they want to?—I have heard no such proposition; it seems to me entirely revolutionary.

14. I saw this in the *Westminster Gazette* last Friday: "At the South-Western Police-Court the magistrate, Mr. Bankes, K.C., said a year had elapsed since he started the plan of asking the police-court missionary to see parties who came for a separation and try to make up their differences before he heard the case. In the year 414 applications had been made; of these, 351, or ninety-two per cent., had been reconciled, and thirty-three, or eight per cent., had come into court." Don't you think that if the way is made very easy for final separation the step might be freely taken?—I don't propose to make it very easy. I prefer to have it thrashed out before a magistrate. I think the five years' period mentioned in Lord Buckmaster's Bill for Separation and Divorce is too long. I think three years would be much more reasonable.

15. Any man tired of his wife would only have to stay away from her for three years and then he could get away altogether?—He would have to go before a judge and say why. He has in some way to go before a court. This is a Bill I have not gone into at all, and I do not know how it bears upon my evidence. I came here on the point of separation and the birth-rate. I am here to show that 500,000 people who are separated from each other are less likely to produce children than 500,000 people married to each other.

16. And therefore you ask that it may be made easier for them to legally re-marry?—Quite so.

17. THE CHAIRMAN. This (Lord Buckmaster's) Bill is not the Bill of the Divorce Law Reform Union?—No. I have had nothing to do with the Bill. I think it is a very bad Bill indeed.

18. There is a Bill of which the Divorce Law Reform Union is sponsor?—Yes.

19. You might send us a copy?—I cannot say we embodied our ideas into a Bill. There was one put forward which I never saw until it was in print, and which I disagree with. Some irresponsible person brought it forward.

20. DR. ROUTH. Are there any specific reasons which you think ought to be included amongst the causes which would enable these people to be separated by law?—I think that it might be left very much to the judgment of a British judge. It is very difficult often to define a case of domestic unhappiness. A man may make his wife's life a misery and burden to her, and yet it would be difficult to explain the reasons. It might be made clear to an English gentleman sitting as a judge that a couple could not live very happily together. There are extreme cases of incompatibility of temper.

21. Cases one comes across in practice are cases where the

husband is obviously an immoral man; or you may have a diseased man who ought not to cohabit with anybody. If the wife of such a man demanded from a court the annulment of her marriage, it would be all right for her, but it would let loose an immoral and dangerous man upon society?—Yes, decidedly. I think, for example, that extreme meanness in money matters may amount to cruelty to a wife. I know of a case where a woman has been driven into the asylum because of her husband allowing her much too little to keep the house and then abusing her because she did not do it. She has been in the asylum twice.

22. Many men and women separate without going through any legal form or arrangement?—Undoubtedly, and the production of children is stopped.

23. Dr. Sullivan. For what reason should insanity be singled out from other diseases as a ground for divorce?—It is a disease of the soul—I mean, the idea of companionship ceases where there is insanity. Where there is bodily disease, the marital partner might be even more fond of the inflicted person.

24. Is it not a fact that responsibility for this disease of the soul may to a certain extent rest upon the other partner, who would, under this scheme, be liberated? It puts a certain premium upon insanity for a person who wishes to be rid of wife or husband?—I should think that the number of insane people driven insane by wife or husband is really a very small percentage of the total.

25. Lunacy would only be ground for divorce after a certain length of time. Is it possible to state, except in a limited number of cases, that recovery is impossible?—The figures came out in the Divorce Commission: two per cent. recovered after three years.

26. Dr. Routh. I suppose most of these lunatics would be in asylums, and therefore absolutely separated?—Yes.

27. Lady Rhondda. You don't mean to say that a person who is mad must necessarily be separated or divorced? It should be voluntary, and persons not wanting to be divorced would certainly visit their husbands or wives who were affected?—Quite so; and divorce would certainly only be after the lapse of a number of years—five, I should say.

28. Dr. Schofield. There are a great number of separated couples?—I am told that as a result of war marriages there are a great number of separated couples, and many of them are boys and girls.

29. You say that living together without marriage lessens respect for that institution. Do you think that the proposed

separation after five years would add to respect for the institution of marriage?—Yes. The late Mr. Plowden was very solid upon that. They get accustomed to the state of cohabitation and are content to do without marriage. If these couples were free to marry all would be clear.

30. Dr. Routh. Is it only when the two parties wished for the marriage to be dissolved that this would apply? Could one apply and the other oppose it?—That is a most difficult question to answer, and I know that reformers disagree. The erring partner might stand out, so that only one partner could go before a magistrate and make out a case. If the two had to go, one might have to wait a long time before he or she could get the other to go with him or her.

31. Is it proposed that the law could override such obstinacy and separate people, so that the innocent party could marry again?—Personally I think it would be well.

32. Mgr. Brown. How is it proposed to deal with children?—I think that must be left, as at present, to the magistrates.

33. Can it be left as at present? Supposing you shorten the period, you may get three sets of children; how are they going to be provided for?—That would be a very extreme case. Would the magistrate grant the divorce a second or third time as easily as the first time?

34. It cannot be refused if this Bill is passed. There is nothing in it which gives the court power to withhold freedom from these people. The children are left out of consideration altogether, which to my mind is one of the most important elements of marriage—the bringing up of the children?—I think the Bill is very imperfect.

35. Can you make any suggestion as to how the children can be dealt with?—You must not make me the apologist for this Bill. I would suggest that cases should go before magistrates, and if the magistrate thought the first or second marriages were bad, he would forbid the third marriage. I would give the magistrates very wide discretion.

36. You would oppose this Bill?—I would modify it. It is better than the present condition of things, but it wants modification.

37. Dr. Reid. Does the Bill not make it automatic? Surely a court should decide whether they are entitled to divorce?—I feel very strongly on that. All cases should go before a County Court judge, or a judge of some sort. Both sides must be heard.

38. Mrs. Clay. Do you consider it a conservative statement to credit each of these re-marriages with a family of

three?—I think it is admitted by statistics that that is the average family.

39. But many of these re-marrying people would be beginning that second endeavour somewhat late in life?—I will not tie myself to the three; whatever addition we get will be a gain. We must go on the general principle that re-marriages will produce a gain.

40. MGR. BROWN. Do you think a woman would put herself deliberately under the bastardy laws rather than have the rights of a married woman?—I do not think the number who would do that would be large.

TENTH DAY

Monday, November 25, 1918

Statement of SIR HENRY REW, K.C.B.

THE Commission have asked me to talk about the population-sustaining capacity of the United Kingdom. Anything like a complete and satisfactory answer to this question I am afraid I shall not be able to give. All I can attempt to put before the Committee are some of the facts which might enable the Commission to form an opinion on the subject. Of course, the sustaining power of the United Kingdom depends on its home products, and perhaps I ought to say in advance that as regards the production of these islands the figures are, and must be in the nature of the case, estimates. There is no attempt, of course, actually to weigh the produce or to ascertain in a precise way the amount of produce which the soil of this country yields. That even applies to such tangible things as the quantity of wheat grown. It is known within very reasonably close limits, but it is, of course, obvious that the whole of the wheat grown is not absolutely weighed or measured; but so far as crops are concerned, the figures, which are fairly well known, may be taken as nearly exact. When you come to such matters as meat and milk you find that these are still more uncertain. The main fact on which the meat production is based, and from which it can be calculated, is the number of cattle, sheep and pigs in the country at a given date. From that it is estimated, on certain data, which have been carefully collected, what amount of meat is produced during the year and at different times of

the year. Perhaps I may say that all these figures have been very carefully gone into, and it is of some little interest, and of personal interest to me, having been concerned with these matters for some years, and having been in charge of the census of production of agriculture, that they have fairly stood all tests that could be applied to them. In 1912 I made a fairly careful estimate of the food supplies of the country, and I arrived at the conclusion that we produced of essential foods, leaving out such things as sugar and cocoa, which are not produced in this country, about one-half. That was the calculation I put before the British Association in 1912. In the recent calculations, published in the Report of the Food Committee of the Royal Society, the rather interesting point comes out that they accepted the census production figures as regards home production practically as they stood; and they reduced them, as they would, being a scientific body, to terms of energy value. The net result of the investigation was to make out a total of home produce representing 21,393,000 of calories as the yearly supply; of all imported produce, 29,731,000 calories. That was on the basis of 1909–13. Well, of that imported produce, sugar, cocoa and chocolate represent 6,633,000 of calories, so that deducting that, you have the imported produce as 23,098,000 calories, or slightly more than home produce. That would give forty-one per cent. as home produce if you included sugar and chocolate, and forty-six per cent. if you excluded them as being home-grown, and that comes pretty near the calculation which I made on the food figures before. But they further went on to point out—and, of course, on this ground I do not profess to be familiar with these physiological considerations—they calculated that the total amount consumed in the United Kingdom represented 4009 calories per man per day, the man being the "average" man, calculated according to a formula which is pretty well known, whereas the standard diet which is necessary to maintain life is 3400 calories per man per day. So if you were to take the amount of produce necessary for the maintenance of life for the then existing population, you would find home produce almost exactly one-half of the requirements in terms of energy value. That is bringing all the various foods into one common class; but when you get down to a practical basis, the variations in the home supply of the various kinds of food commonly consumed are very great. We are self-supporting as regards fresh milk. We do import a certain amount of condensed milk, and if you take into account the condensed milk, and reduce it to terms of fresh milk, we are self-supporting to the extent of ninety-five

per cent. of milk. I am still dealing, of course, with pre-war figures. On the other hand, in the case of wheat, on the basis of 1910–14 we only produced twenty per cent.

Of other things of which we produce comparatively little, there are cheese, of which we produce only twenty per cent., and butter, including margarine, of which we produce only twenty-five per cent. As regards meats of all kinds—including beef, veal, mutton, lamb and pig meat—we produce about fifty-eight per cent. Of poultry, eighty-three per cent.; eggs, sixty-eight per cent.; fruit, thirty-six per cent. Bananas and other exotic fruit are a very large element, of course. Of all vegetables we produce ninety-two per cent. Of course, all these figures have been very much altered during the war, but to what extent they have been altered I am afraid I cannot altogether inform the Commission. A good many of the figures, as you know, are confidential, and some are not in my possession; some are and some are not, but in any case, the actual figures of what we have imported and what we have produced during the war cannot be dealt with. They must, in any case, be regarded as abnormal. So far as wheat is concerned, the produce this year will probably amount to about 11,000,000 quarters, representing about one-third instead of one-fifth of our annual requirements, still assuming that our normal requirements were the pre-war requirements, and also assuming—what was not true up to quite recently—that all our breadstuff was wheat. The wheat acreage of 1918 was 2,797,000 acres, the largest since 1882. We also grew the largest crop of potatoes on record. The crop will probably reach nearly 9,000,000 tons. That potato crop—and this is rather an important point—only includes the potatoes which are grown on farms of one acre and upwards, and does not include the very large amount grown on allotments and in private gardens.

It has been estimated that the total produce of the allotments, very largely started during the war, is about 800,000 tons of all foodstuffs. My idea is that probably one-third to one-half is potatoes, but that is a very rough estimate.

I have given you these figures as indicating home production before the war. The vital point, after all, is, how far is the land of this country being utilised for food production? The total area in the United Kingdom is 76,500,000 acres, excluding water. It is very difficult to give the figures of Ireland with those of Great Britain, and if you will let me confine myself to the figures for Great Britain, I think it would be clearer. Ireland may be regarded as practically a self-supporting country. In ordinary times Ireland exports

bacon and butter, and imports grain and wheat and maize, but I think, very roughly indeed, that Ireland could, if it wished, be self-supporting on balance and probably more. It does not at the present time grow its own breadstuffs, or only to a quite immaterial extent. It imports a lot of wheat and flour and a lot of maize to keep the pigs going, but, on the other hand, it has a large export of meat—that is, live cattle, and also of butter and bacon; but on the balance, if it chose to confine itself to the support of its own population, it could probably do so easily. I think the figures for Great Britain, for the utilisation of land in Great Britain, are more definitely given, and will answer the purpose. The total area of Great Britain is 56,000,000 acres. Of that 31,748,000 acres are what we term cultivated area, which means area actually comprised in the farms of the country; the farm area would, perhaps, be a better term.

But in addition to that, there are also the rough grazings, such as the hill farms in Scotland, and all that is turned to use in the uplands and moorlands of Scotland. They all do maintain a certain—very often a small—amount of stock, and that class of land which we call rough grazings comes to about 13,500,000 acres. It helps to maintain a certain number of sheep. If you take the farm areas, these represent fifty-six per cent. of the whole area. If you add the rough grazings, which may contribute to some extent to the meat supply, they represent twenty-four per cent. of the total area. Woodlands—a good deal denuded at present—represent 2,700,000 acres, or five per cent. of the whole, in addition to the farm area. Farm areas do not include woodlands. Farms do, as a matter of fact, contain a certain amount of plantation, but these figures relate to woodlands kept in hand by the landlords. That would leave not utilised for production in any sense (I should qualify it, but for the time being the balance is) 8,000,000 acres, or fourteen per cent., but which does include all the allotments and gardens, and, of course, towns, roads, railways, mines and all other purposes to which land can be put.

Perhaps I may also say that what I call the farm area consists at the present time of almost exactly half and half arable and pasture. The arable land is 15,852,000 acres, and permanent grass 15,896,000 acres. These are the present year's, 1918, figures. It may be of interest to the Commission to go back again. When we are dealing with population we have to go back to census years, and I took out the figures for the population of the United Kingdom, which I daresay the Commission are very familiar with. In 1821

we had nearly 21,000,000; in 1871, 31,500,000; and in 1911, 45,025,000 population. For the purposes of argument, we may take it that there has been no very material change from 1911, so that it may be of interest to the Commission to compare our position in relation to population in 1911 with that of 1871. In 1871 the farm area of the country represented 1·18 acres per head of the population. In 1911 the farm area represented ·79 acre per head of the population, just over three-quarters of an acre per head. In 1871 the arable land, land under plough, represented ·71 acre per head. In 1911 arable land represented ·36 per head, or almost exactly one-half. The wheat acreage per head in 1871 was ·14 acre, and in 1911 ·05 acre. In 1871 the number of cattle represented ·2 per head of the population, and in 1911 ·17 per head. In 1871 the number of sheep represented 1·04 per head of the population, and in 1911 ·65 per head.

1. Dr. Routh. For last year I thought the figures had been made up. You cannot give us any figures?—I can give you the figures of acreage for any of the crops. What figures do you want? I gave you the figure for this year; I can give it to you for each of the war years. I gave you 11,000,000 quarters as the wheat crop for 1918. The figure for 1914 was 7,804,000 quarters; that was just after the war broke out. In 1915 the figure was 9,239,000 quarters; in 1916, 7,472,000 quarters; in 1917, 8,040,000 quarters. Would you like any of the other crops? The exact figure for 1918, which I gave, was 11,000,000 quarters, but that was only a provisional figure; it is nearer 11,500,000 quarters—11,500,000 quarters I think you might put it down at.

2. Lord Willoughby de Broke. You said the highest since 1882?—Yes, that was the acreage; the acreage, I said, was the highest since 1882. It is the biggest wheat crop we have on record.

3. Dr. Stevenson. Has the yield per acre gone up since 1882?—Not very materially. I should say there has been an increase since 1882 of something like a bushel per acre. You must take a range of ten years before you can get anything like a measure of progress, because of seasonal fluctuations.

4. Dr. Routh. You have not told us the acres per head of food-producing land?—I only told you for 1911, because I have not precise figures for the years since then.

5. Colonel Bond. The drop between 1915 and 1916 was due to harvest seasons?—Yes. The 1917 acreage of wheat in the United Kingdom was 2,106,000, so that there was an increase of about 600,000 in the acreage for 1918 over

1917. The increase in the crop was partly due to acreage and partly seasonal. This year's crop was, of course, the best of the war, but 1914 was also a very good crop, but on a smaller acreage. As I say, I have only just put these figures before the Commission as what you might call rough data from which we might attempt to draw some conclusions. It is quite clear that there are two possibilities of increasing home production. One is to increase the productive area, and that, on the basis of the figures, would seem to be a reasonable possibility. There has been practically no increase in the amount of land under cultivation. In fact, in recent years there has been rather an encroachment on the land under cultivation by the extension of the towns, without any corresponding reclamation or the bringing of fresh land under cultivation. In this morning's papers there is an indication that the Government are seriously considering the policy of making a substantial effort towards increasing the productive area by the reclamation of land, and, of course, there are very considerable possibilities if State funds are given to that purpose. It does not appear to have very much hope if it depends on private enterprise. It is a good many years since any large scheme for the reclamation of land was undertaken by private enterprise. I rather think the last was the scheme of the Duke of Sutherland in Scotland thirty or forty years ago; but if the Government is going in for the reclamation of waste lands, bogs and so on, on a substantial scale, with the assistance of State funds, no doubt there is a possibility that the productive area of the country may be materially increased. It takes a lot of reclamation to add very substantially to the present cultivated area, and I am unable to give any estimate as to what the possibilities are, dependent, as it is, almost entirely on State action.

6. THE CHAIRMAN. The increased transformation of acres under plough?—No; increase in the land brought into cultivation. A typical instance is the Wash, which has been a problem for many years. It would be an addition to the land of the country; there has been a commencement made with it.

LORD WILLOUGHBY DE BROKE. To reclaim the Wash costs about £25 per acre.—That is doing it a little at a time.

I reclaimed a farm from the Wash, so I know.—What I was thinking about was building a dyke right across, and that, I should think, would cost considerably more than that.

No doubt; that would be another matter. In my case

it turned out to be the equivalent of paying off the fee simple of the land, about £25 per acre, and finding farm-houses, roads, and so forth. It was a very good proposition.

SIR HENRY REW. I have already referred incidentally to the productive area which is outside the farms. According to an estimate which we made some time ago, the total number of allotments was 1,400,000 in 1918. These are holdings of less than an acre, but I think the figure is considerably understated. In any case the allotments have been increased, and in all probability will increase, and to the extent to which they are increased they increase the number of what you may call partial self-supporters. It is possible, I think, for a man to live on the produce of an acre of land if he is not particular as to what he eats—if he will live on exactly what he can get—but it is extremely improbable that a man would attempt to live on what he could get out of an acre of land. After the war many of the allotments in urban districts may have to be given up, but there is a tendency to retain them, and there is a very considerable movement to increase them; and further than that, of course, there is a very considerable probability of a large extension of plots of land larger than allotments to provide for ex-service men, say, probably three to five acres. I should very much doubt whether the allotments which have been taken up, very often for the first time, by town people will be given up very readily. Also almost any extension of housing will have to provide for increased gardens, which would all more or less tend to increase the food supply. Of course, the first obvious means of increasing the production per acre is to turn grass-land into arable land. That has been done to a substantial extent during the war, but we still have not got back to anything like the position we once held in that respect. In 1871, for instance, sixty per cent. of the cultivated area in Great Britain was under the plough. In 1911 the proportion had fallen to forty-six per cent. In 1918 it is almost exactly fifty per cent. The main difficulty is in attempting to give the Commission any guidance at all as to what can be done or what will be done. The whole matter depends so entirely upon the attitude of the State towards agriculture in the future, and it is extremely difficult to speculate on what will be done with the land of this country. The State, up to 1917, both during the war and for a long time before the war, confined itself to advising and persuading farmers to take certain courses, but it did not directly intervene. It intervened in 1917 by the Corn Production Act, which, on the one hand, offered inducements to farmers to cultivate wheat and oats, and, on the other hand,

took compulsory powers to improve the productivity of the soil. These steps were taken as war measures, and were of a temporary character, but the whole of the output of this country, and the class of the output in the future, depends so entirely upon what the State will do that it is extremely difficult to forecast. This country can be self-supporting, and is, in fact, self-supporting in regard to certain foods. It is so in milk and potatoes, and can be in vegetables. The fact that it did import a certain quantity of potatoes in former times was due to the fact that we like to have new potatoes before they can be grown in this country. It is only because we want a variety of vegetables that we import. We can grow quite enough. But if you are going to transform the land of this country with any intention of its becoming self-supporting in breadstuffs, meat, butter, cheese, poultry, eggs and fruit, that involves such a revolution in farming that it is very difficult to contemplate, and I find it extremely difficult to express any opinion as to how far the land of this country will become more self-supporting than it is.

1. THE CHAIRMAN. We are a Birth-rate Commission, and we have to consider the arguments of people who say that this country is in danger of over-population. Many of us think that that is not so, and the idea is to try and get some data as to how far that proposition as to over-population can be maintained. I think we owe to your own department a very important datum, as, for instance, that on 100 acres you could support 420 people with potatoes, whereas you could only support fifteen people if the land was producing grass for beef. It is clear that any proposition as to the population-sustaining capacity of the United Kingdom must take into account that particular kind of data, and I had hoped that perhaps you might be able to indicate to us what kind of figure could be reached, supposing the diet to be very much simplified, and much more the form of diet we have been existing on recently?—I find it extremely difficult to put it into figures, especially offhand. We have been living on reduced diet of everything, perhaps, except bread, for some time. The question is, is that a satisfactory diet?

2. In any case your own quotation from the physiologists is that before the war we were eating fifteen per cent. more than we needed?—Yes. I do not know that the people of this country are inclined to go more short of food than they did before the war, as a whole.

3. MGR. BROWN. Surely we have been eating much less high-grade bread?—You have been eating barley and maize and a slight percentage of potatoes.

4. Miss Michelmore. You cannot prevent people eating in peace times?—I think you have to assume that the appetites of people in the future are going to be as big as in the past, as long as they can get the food and the choice.

5. Dr. Stevenson. Is the fifteen per cent. actual increase in consumption, or does it represent much food waste?—I never quite knew what that figure of fifteen per cent. means. I do not know, except on the authority of the Royal Society, that 3400 calories is a sufficient diet for a man. It may be an under-statement.

6. If you take the consumption of potatoes by the number of potatoes sold in the market, it will come out much higher than if you take the weight after the potatoes are prepared and served on the table. There is a certain amount of wastage there, and the same applies with other foods. If these figures were got out on the producers' returns they would show a higher consumption than if you could make due allowance for the inevitable waste?—I think that is true. These figures were got out on production.

7. It need not imply that we have been eating more than our 3400 calories?—It need not imply that we have been eating so much more.

8. Lady Selborne. What does the amount allowed to the Army come out at?—I have not got the exact figures, but it is higher than the average standard-man diet.

9. That is what is necessary to keep a man in form—working men or fighting men in first-rate form?—Quite.

10. The Chairman. On the figures of Sir Thomas Middleton about the yield in Germany and this country, you agree with the general thesis that the better use of fertilisers would gradually increase production and the number of people who could be sustained?—I do not mean that it entirely depends upon State action, but it does do so to a great extent—to this extent, the elimination of the incompetent farmer. That is recognised in the Act. How far it is going to be applied, I cannot say, but it is a principle which is accepted by the Act. In addition to that, much might be done by the further education of farmers, and by putting facilities within their reach for such things as supplies of fertilisers.

11. For instance, we might turn over to the production of fertilisers a great deal of the plant that has been in the hands of the Ministry of Munitions, for the supply of nitrogenous compounds, so as to get seventy people fed per unit instead of forty?—Certainly, I hope so.

12. Sir William Crookes, in his book, *The Wheat Problem*, says: "These are given in the following striking table,

which is based upon data recently published in the yellow book of the Board of Agriculture (C.D. 8305), Table XI.

Average farm produce of 100 *acres of cultivated land*

Great Britain	Germany
15 tons corn	33 tons corn
11 „ potatoes	55 „ potatoes
4 „ meat	4½ „ meat
170 „ milk	28 „ milk
Negligible quantity sugar	2¾ „ sugar

The British farmer feeds from forty-five to fifty persons per 100 acres, while the German farmer feeds from seventy to seventy-five. The comparative value of the produce per acre of British and Belgian land, which closely resembles it as far as natural facility is concerned, is said to be as 19 : 80, so that the British farmer appears to be very much behind the continental farmer in extracting money from the soil. The explanation of the greater productivity of the German farms becomes clearly apparent when the consumption of artificial fertilisers is examined. This is shown in the following table.

Average consumption of fertilisers per acre

	Potash fertilisers.	Nitrogenous fertilisers.
Germany . . .	10·68 lbs.	7·21 lbs.
France . . .	0·71 „	3·65 „
United Kingdom . .	0·09 „	2·22 „

It is said that Germany imports about ten times as much Chilian nitrate as the United Kingdom, and one-third of all the nitrate exported is consumed by Germany alone. Hence it is hardly surprising that the yield per acre of German farms has nearly doubled in thirty years." It shows that we are far behind in the race with German farmers, who produce much more food than the British farmers. It is greatly co-related to the amount of fixed nitrogen that the German farmers put on their land?—If that fixed nitrogen be added to the soil, its productivity can be enormously increased.

13. Dr. Scharlieb. We are wasteful as a nation as compared with France and Italy?—I should say so certainly from my own observation. We do not feed properly and we cook badly. So far as the actual amount consumed is

concerned, the French consume a good deal more bread than we do, but not so much meat.

14. COLONEL BOND. Would you not agree that, as regards over-eating of the population as a whole, it certainly does not apply to children under five?—No. I mean as regards the mass of the population.

15. On the question of turning pasture into arable land, is it not important, from the point of view of milk production, on which the life of the children largely depends, that that should be encouraged? Are we not rather prejudicing the welfare of the children in getting larger food supplies?—I do not think it follows. I think it is only a change of method, and that you ought to be able to produce just as much milk, and probably more, from a given area of arable land than from the same area of pasture.

16. DR. ROUTH. In your précis towards the end you say, "Under free working of economic conditions grain production would be reduced, but potato production would be maintained." Do you mean it would be advisable to have grain production increased relatively to potato production?—No. If you assume no interference by the State, no Corn Production Act, no bounties, no duties, and leave things entirely to free economic play, as in the past, I think the corn production in this country will decrease.

17. You do not think that would be advisable?—I do not personally, but I think it is a matter for the State. The State, I think, is not going to allow things to go back to the old position, and allow free play of economic conditions as regards agriculture, and it will take some steps to prevent corn and arable cultivation as a whole going back to the former state.

18. How is the State going to persuade the nation to adopt these methods, by grant, or by increasing the minimum wage of the workers? Have you any idea?—No.

19. MISS BROOME. Regarding the production of milk, if pasture land be ploughed up and wheat sown on it, we should not get enough pasture land for the cows to produce milk. We cannot very well import milk?—Every acre of wheat involves three acres of other crops under the plough, taking the four-course system. These other crops go to help maintain the stock.

20. LADY SELBORNE. Practically you think that we cannot keep the food up to the present state of production without some artificial aid?—You can keep up the greatest production of certain articles. My own view was, that if there was no interference by the State, and free economic

conditions worked, that in the long run articles such as corn, which can best bear long carriage, will be those which will be produced abroad and not in this country, and that the perishable articles, such as fruit, vegetables, milk and articles of that description, would be those which would be naturally produced in this country. Therefore you might be producing an overwhelming quantity of perishables, and possibly of poultry and eggs.

21. Unless you have some artificial protection, farmers will naturally tend to grow that kind of food which can be grown with the least labour instead of bringing the land into full cultivation and employing a great deal of labour? —Yes, certainly. That is the main reason why pasture has increased in the last thirty or forty years—because it was cheaper production.

22. Miss Michelmore. What effect will new cities and new towns have upon the land? Every new town would probably make a difference to the surrounding district by increasing the demand for vegetables produced around that town?—Any urban centre is bound to have a sort of fringe within which it would have that effect. If you reduce the density of the population to the acre, you are encroaching on the productive land.

23. Dr. Stevenson. Will the substituting of the horse by the motor means of transit have a very deleterious effect on agriculture by diminishing the supply of manure, and how far can that be made up by artificial manure? Is it a serious matter?—I have not thought it very serious. It would affect those who are dependent on town manure for their holdings, but I should not think it would make a very material difference to farmers, who could be very easily supplied with artificial fertilisers having the same physical characteristics. Although there has been a considerable increase in motor transport, the horse population has not decreased on the farms.

24. Dr. Marie Stopes. A good many people talk optimistically about increased production. How long is that increased production going to last? I suppose the maximum increase of land under cultivation would be between two and three million acres, and then, even with the additional use of fertilisers, we could not double present production?—No.

25. So, therefore, we could not support even the population we shall have in ten years if we do everything which is the maximum we can do?—No, I don't think so. What are you putting as the definite population in ten years?

26. We could not support the population we have at the present time?—No, I don't think so, assuming the same national diet.

27. How much is all this increased production and all this increased area likely to affect our increased population problem?—I don't quite know. If you ask me whether any population which you are contemplating in the future can be kept in this country out of the production of the soil of this country, I should say no.

28. MGR. BROWN. In regard to milk, it is absolutely not obtainable in many villages and many small towns. You cannot buy it; it is not on sale now or in pre-war times. It is also true in Ireland. I have been in villages in Ireland where the clergy have told me they have had to denounce all the farmers because the milk went to the creameries. I know it is also so in parts of London. How that can be said to be self-supporting I do not know. It may be that the amount of milk which is commercially dealt with is found in the country, but that the amount of milk which is needed by the population is to be found in the country I cannot believe, unless some one drinks enormously too much in the towns?—We measure the need by the demand.

29. You only count the cows, and allow a certain milk yield, and then say it is found, but I cannot say that that is true—that this country is self-supporting in its milk production. If you go to any of the great milk-production areas, say within a hundred and twenty miles of London, you will find that the local people cannot get milk. The farmers have contracted to sell the whole of their milk to the towns?—I did not intend to convey that if you are to lay down what ought to be the allowance of milk to the population on an optimum or ideal basis, or even on a necessary basis, that you would find that we produce that at all.

30. I thought that was the kind of thing we were trying to find out, if the country could get enough milk. It is admitted that the country does not get an optimum amount?—That would carry you further than I have attempted to go. The same thing would apply to fruit; personally I think the country does not get enough fruit. I have not attempted to estimate what it would be desirable that the country should get. Children can live without fruit, but not without milk.

31. DR. SULLIVAN. It is children under two who mainly depend on milk?—Yes.

32. And it is children under two whose death-rate has fallen during the war?—It was lower in 1917 than in any previous year.

33. Dr. Routh. One is often asked by patients to give them extra rations of milk and cream. I find you cannot get them extra milk, but you can get any amount of cream.

34. Lord Willoughby de Broke. I do not know that that cream comes from the cow. It is made from rabbits' brains and so forth. It is easier to make cream than milk. You would agree with the general principle that it is desirable we should try to produce more food, whatever the population may be ten years hence—more of the food which can be produced here, and which we do not produce enough of now?—Certainly.

35. You would agree that the wheat-producing area should be increased?—Yes.

36. You would agree that if more grass-land was converted into arable land the milk supply need not seriously suffer, and that, in fact, by producing more food to feed the cows upon, it might actually increase the milk-giving properties of the cows?—That is my opinion.

37. Therefore, in order to make grass-land produce more wheat and to have better farms in order to produce more of the food that we want for the nation, you say we ought to eliminate incompetent farmers, give farmers greater facilities and more education in farming and all that sort of thing?—Yes.

38. When you have eliminated the incompetent farmer, and given farmers facilities and so on, it really resolves itself into a question of price?—Yes.

39. No matter how incompetent the farmer may be, no matter how much fertiliser you may supply to him at a reasonable rate, no matter how much encouragement and State assistance he may have, you are not doing any good unless some steps are taken by which prices are kept right. I don't see how you are going, how the Government is going to ask farmers to convert more grass-land into grain-land, highly desirable as it is admitted to be, unless they are going to take steps to keep the financial end of it right, either by taxation or by a bounty or some other payment of that kind?—There is an alternative, of course, which is indicated in the Corn Production Act—a guaranteed price. Whether that comes within the political definition of a tax on food, I am not prepared to say. The price, no doubt, will be a governing factor, but price must be relative to the cost of production.

40. MGR. PROV. BROWN. Is the guaranteed price of cattle a factor?—The guaranteed price given by the State is only for wheat and oats. These controlled prices are outside the Act of Parliament altogether, although it has been moving in the same direction. The system of food control is not eternal. Outside the guaranteed price in the Corn Production Act, you have a guaranteed price for meat, for potatoes, and for milk, but they are outside the Act and are war measures only.

41. THE CHAIRMAN. You have not dealt with increasing our food supplies by means of fishing, but that is a separate question altogether?—Quite separate.

THE CHAIRMAN. Mr. Newton Crane comes here on behalf of the National Council for the Unmarried Mother and her Child. The Chairman of his Committee, Mrs. Fisher, has already given evidence before us, and is a member of this Commission.

Statement of MR. NEWTON CRANE (National Council for the Unmarried Mother).

My attention has been occupied for some time past in an inquiry to ascertain the extent and character of the legislation in several countries, and particularly in our Colonies and the United States of America, having for its object the protection of infant life. It is gratifying to observe that in countries so widely separated as the Australian Colonies and the Western States of America the same principles have actuated the legislators. Upon the theory that children are the capital of the State, they have recognised that it is the foremost duty of the State to preserve and increase its capital, and consequently to encourage mothers to bring healthy offspring into the world, and to assist them to rear their children to become desirable and useful citizens. A strong and healthy infant cannot be born of an ill-nurtured, impoverished and neglected mother. It has therefore been the foremost care of the Legislatures in a majority of our Colonies to provide nursing and medical attendance for expectant mothers and to continue this care for a reasonable period after childbirth. The statistics in the newer countries agree with those in the Mother Country, that a very large proportion of the deaths of infants occurs in the first days and weeks of their lives, and that this mortality can be prevented in a large measure by ensuring that the mother

shall have the nursing and the care of her infant during this critical period. This mortality among newly born children is disproportionately greater among illegitimates. Special provision has therefore been made to ensure that unmarried mothers shall have every possible care in the anti-natal period. In Western Australia, New South Wales, Victoria, Queensland, New Zealand, and many States in the United States and in the Scandinavian countries, notably Norway, provision is made that the expectant mother, or some one on her behalf, may make known her condition in the proper quarter and shall be enabled to take paternity proceedings. While in England an expectant mother may take out a summons against the alleged father of her child, such a summons may not be heard until after the birth of the child. This results in a denial of justice, as is illustrated by the fact that in 1913, the latest date for which we have any accurate figures with regard to the matter, while 37,909 illegitimate children were born, only 6,914 affiliation orders were made. It would be, in my opinion, greatly to the advantage both of the State and the mother, for economical as well as humanitarian reasons, if applications for affiliation orders were made at the earliest possible moment, before the birth of the child, and that the proceedings in connection therewith should be heard in camera. It is reasonable to assume that in such circumstances the mother would be more likely to institute proceedings, realising that she would be saved from the exposure incident to her condition, and that she would have a more sympathetic hearing. On the other hand, there would be a greater likelihood that evidence to establish her claim would be more readily secured at this stage, and that the defendant might be served before he had an opportunity of leaving the jurisdiction. It is also probable that the reputed father would admit paternity if the proceedings were in private, and he was thereby convinced that he would avoid the publicity which, according to the common experience of those who are best acquainted with these proceedings, is the greatest incentive to deny the charge. In the countries to which I have referred the costs of these proceedings are borne by the State, on the theory that the State has an interest in the result of the application, as, if an effective order is made against the father, the State will thereby be relieved of the expense of the care of the mother and the infant. The principle that the State should undertake this expense is admitted in this country in the Affiliation Orders Act of July 31, 1914. By this Act a collector is appointed by the

court to collect, without charge to the mother, the sums payable under an affiliation order, the expense being defrayed from the fund out of which officials of the court are paid. The intervention of the State to secure the support of expectant mothers and their infants is the same with respect to both married and unmarried mothers, as all of the countries whose laws I have examined make provision for orders against husbands deserting their wives at this critical period, and to provide for the nurture and rearing of the children. In most countries the basis of the award in cases of affiliation orders is the responsibility of the father, and there is no sum fixed in the statutes. This is left to the discretion of the court, as in cases of applications by married mothers who have been deserted by their husbands. The means of the father and his ability to earn proper support for the expectant mother and the child are factors which the magistrate considers in making his award. Foremost among the Acts passed to ensure the protection of infant life may be quoted that of Queensland, passed in 1905, particularly as it is typical of similar legislation in almost all of the colonies of Australia and New Zealand. The Queensland Act embraces provisions for nursing homes, the adoption of infants and the recovery against the father of confinement expenses in cases of illegitimate infants. The cost of the confinement expenses is limited to £10, and such expenses include reasonable medical and nursing fees, and the cost of board and lodging and clothing necessary for the child for two months after its birth. An order may be made and be enforced against the father before the birth of the child, upon competent medical evidence of the woman's condition. In the absence of such evidence the order is not enforceable until after the birth of the child. The complaint or information may be made either by the mother herself or on her behalf, or by the police authorities acting on their own motion. The provisions for the regulation of nursing homes are very stringent, and are directed against "farming out" and similar abuses. The elaborate Infant Life Protection Act, 1915, of Victoria provides, *inter alia*, that where an order has been made for the support of an infant, and the weekly payments fall into arrears for a period of four weeks at any one time, the infant in respect of whom such payment should have been made shall thereupon become, *ipso facto*, a ward of the Department established by the Act. It is difficult to procure any figures in the way of statistics, owing to war conditions, as they have not been transmitted to this country in a satisfactory manner. It is,

however, interesting to note the steady decrease of the proportion of illegitimate to the total number of births throughout Australia of late years. During the last ten years the percentage for the entire Commonwealth of Australia has decreased from 6·24 in 1905 to 5·12 in 1915. In Queensland the following figures have been obtained—

Year	Percentage
1911	6·4
1912	6·14
1913	6·15
1914	6·86
1915	5·41

In Western Australia the following figures indicate the ratio of illegitimate to legitimate births—

Year	Total number of births	Legitimate	Illegitimate	Illegitimate percentage of total
1913	9233	8821	412	4·45
1917	7882	7555	327	4·15

In New South Wales, according to the *Official Year Book* of 1916, the illegitimate percentage of the total number of births in 1915 was 5·07. Where the ratio is taken of illegitimate births per thousand women, aged fifteen to forty-four, the percentages are as follows—

Year	Percentage
1891	18·41
1901	16·10
1911	14·18

In New South Wales the following figures with respect to infant mortality are given—

Year	Legitimate infant mortality rate per thousand.	Illegitimate infant mortality rate per thousand.
1910–14	67·21	162·78
1915	64·2	141·00

The Norwegian Illegitimacy Law of April 10, 1915, has attracted great interest in this country, as it contains some novel features. While it is generally recognised as a radical measure, nevertheless the principles laid down in it are in the nature, it is claimed, of a return to some of those recognised in the early Folk Law of Norway, under which the illegitimate child had a qualified right of inheritance from the father, and enjoyed substantially all the legal family rights of the legitimate child. These rights of the illegitimate child were abolished about the middle of the seventeenth century. The most radical change made by the new

Norway Legislation consists in putting the burden of establishing paternity and fixing the obligation of maintenance upon the State instead of upon the mother. The mother of an illegitimate child is required by law to report the facts to the local authorities, and it is made the duty of the court to summon the alleged father to answer the charges. Further novel features in the law consist in: (1) requiring the economic support to accord with the means of the better situated of the parents and not with their average means; (2) extending maintenance until the child is sixteen, and in some cases even beyond that age; (3) equalising the burden of contribution by requiring contributions from the mother if circumstances of wealth justify that; (4) requiring the contribution of benefits to the mother for three months before confinement and also during confinement; (5) payment for special nursing expenses for nine months after birth if the child is with the mother, the law fixing certain minimum and maximum amounts for these contributions, and (6) forced collection of contributions on the initiative, and at the expense of the State, and not that of the mother. The following figures give the total number of legitimate and illegitimate births in Norway in the following years—

Year	Legitimate	Illegitimate
1910	57,106	4041
1911	56,930	4110
1912	57,569	4184
1913	56,986	4386
1914	57,079	4409
1915	54,435	4293
1916	61,305	4636

No statistics are available yet for 1917. As to the Returns for 1915 and 1916, it is stated that these figures are only provisional. The increase of births in 1916 is stated, probably to be due to the new regulations in force regarding notification of births. The infant mortality rate per thousand in the first year of living born children is—

Year	Legitimate	Illegitimate
1876–1880	99 deaths	126 deaths
1881–1885	96 „	131 „
1886–1890	91 „	160 „
1891–1895	92 „	174 „
1896–1900	89 „	177 „
1901–1905	75 „	150 „
1906–1910	65 „	132 „
1911	61 „	116 „
1912	63 „	129 „
1913	61 „	117 „
1914	63 „	123 „
1915	64 „	114 „

The State of Missouri, as recently as April 1917, passed an Act to provide for the support of needy mothers with dependent children and of women about to become mothers. This follows the line, and in some respects extends the principle, of what are known in America as "Mothers' Acts." These have become so popular that they have been enacted in no less than thirty-four States. The amount of the allowance is fixed at £3 3*s.* a month where the mother has only one child, and not less than £1 2*s.* a month for each additional child, provided that in no case shall a larger allowance than £8 a month be made, and it is expressly stated that the benefits of the Act shall be extended in order to enable a mother to nurse her child and to care for it in her own home. In America generally a concerted movement has been made by the various States for the education of expectant mothers, in order to acquaint them with methods of the kind of care they should exercise to prepare themselves for confinement and their duties after the infant has been born. A Bill was introduced in the Senate of the United States in June last having for its purpose the encouragement of instruction in the hygiene of maternity and infancy, and to extend the proper care for maternity and infancy, and to provide for the co-operation of the several States in the promotion of such instruction and care in rural districts. The Children's Bureau of the Department of Labour, under the direction of its Chief, Miss Julia C. Lathrop, has prepared and circulated gratuitously in all parts of the country pamphlets dealing with this subject. These publications, which are greatly sought after, are divided into series, such as the Care of Children, Infant Mortality, Rural Child Welfare and the Legal Series, which covers the laws with respect to the subject. As an illustration, the pamphlet dealing with Maternal Mortality embraces not only the statistics with respect to the United States, but all other countries. It reveals the significant fact that in America the average death-rate from purulent infection and septicæmia, which in 1901 to 1905 was 6·1 per 100,000 population, fell in 1906 to 1910 to 3·8, and the figures then decreased steadily, being 2·8 in 1913. In the same way the death-rate from simple peritonitia, which was 10·8 in the period 1901 to 1905, fell to 6·1 in 1906 to 1910, and to 2·7 in 1913. These results are evidently due to the educational propaganda which has been so energetically carried forward by the Children's Bureau. The various States, as distinguished from the Federal Government, have endeavoured for some years past, in

response to public demand, to lessen the death-rate among children, and to increase the birth-rate of healthy infants, by providing restraints upon the spread of tuberculosis and venereal and other communicable diseases. The recent Law of Indiana for the prevention and control of tuberculosis is an illustration of this type of preventative and curative measures. The State has declared by statute tuberculosis to be infectious and communicable and dangerous to the public health. Every practising physician is required, within five days after the fact comes to his knowledge, to report the name and address of every person known by him to be infected with tuberculosis. The Chief Officer having charge of any hospital, dispensary, or private or public institution, and every school physician, is obliged to report the name, age, sex, occupation, place where employed and the home address of every person under his care having tuberculosis. These reports must be transmitted to the State Board of Health, whose officials are required to investigate the prevalent cases and the distribution of the disease, and the ways and means for restricting and controlling it. The results of these investigations are required to be publicly and gratuitously distributed throughout the State for the enlightenment of the people as to the prevalence and dangers of the disease and the best methods for its prevention and cure. A number of States have enacted laws which forbid the granting of marriage licences to persons of tainted blood, or the feeble-minded, or epileptics, or those affected with tuberculosis and venereal diseases. Minnesota has a law providing that no woman under the age of forty-five, or a man of any age, except he marry a woman over forty-five, either of whom is epileptic, imbecile, feeble-minded or afflicted with insanity, shall intermarry or marry any other person within the bounds of the State. Similar laws have been passed in Michigan, Delaware, Connecticut, New Jersey, and North Dakota. An Act of the Wisconsin Legislature, passed in 1913, to prevent the marriage of a person affected with a venereal disease, by requiring all applicants for a marriage licence to produce a physician's certificate of freedom from the disease, evoked ridicule and protest, and led to litigation to determine the constitutionality of the regulation. The measure, however, survived the ridicule and overcame the protest against it, and, as amended last year, is now pronounced by the State Health Officer of that State to be very satisfactory in its operation. This official asserts that it has prevented the marriage of a considerable number of

people infected with venereal disease in a communicable form, and that opposition to it has disappeared. He further states that men from adjoining States, contemplating marriage, have resorted to Wisconsin in order to comply with the requirements as to examination. It is claimed that the education of the public in regard to the dangers to meet which the law was passed is one of the chief benefits of the law. During the past year a law has been enacted in New York which requires each party to an application for a marriage licence to lodge with the authorities an affidavit, in a prescribed form, to the effect that he or she has never knowingly been infected with any venereal disease or, if so infected within a period of five years from the time of the application, has since had a laboratory test of the blood which has demonstrated freedom from such infection. New Jersey has gone further, and made either marriage or intercourse by any person knowing himself or herself to be infected with venereal disease a misdemeanour punishable by heavy fine, or imprisonment, or both. It is, however, recognised that prevention of marriage does not prevent the birth of disease-infected children, or children of impaired vitality, incapable of surviving the period of greatest liability to infant mortality. The laws restricting the granting of marriage licences to healthy people alone are strongly opposed, on the ground of their insufficiency, by those who appreciate the danger from this source of illegitimacy, particularly among the feeble-minded and the wastrels of the community, who are subject to no self-imposed moral restraint. This has led to the rapid growth of a sentiment in favour of some form of sterilisation of the insane, the epileptic, the imbecile, those tainted with ineradicable communicable diseases, the sexual perverts and habitual criminals. Statistics in America conclusively prove that this class of degenerates is multiplying out of all proportion to the increase of the general population. Year after year in every State renewed demands are being made for grants of the public funds for the enlargement of the institutions for the housing, the care and the segregation of such persons. The argument of those who advocate sterilisation is based upon the assertion that degeneration is a defect, and that a defect differs from a disease in that it cannot be cured. In 1907 a law was passed in Indiana, the first of its kind in the history of the United States, making it the duty of officials of certain State institutions to examine the inmates under their care to ascertain their mental and moral condition, their personal

records and their family traits and histories, and granting to them the right to perform an asexual operation where, in their discretion, it would be to the benefit of the subject and the community at large. Such operations had been performed by consent in the Kansas Feeble-minded Institution as far back as twenty years ago, when forty-eight boys were operated upon by consent, and in Indiana Dr. H. C. Sharp, the physician of the Indiana Reformatory, to whose exertions the passage of this first law is mainly due, had, prior to its passage, been performing the operation also by voluntary consent. In this way he had treated 236 cases, with entire success. The results in Indiana have led to no less than twenty-two different States passing a sterilisation law, such Acts having found their place upon the Statute Books of Oregon, Kansas, South Dakota and California within the past year. In Washington and Nevada the law is purely punitive, being applied to rapists and criminals guilty of sexual offences, but in the other States the object of the law is to protect future generations. In this regard it may be considered to be purely eugenical in its motives. Naturally these laws have provoked opposition, which has led to their consideration by the courts in six States. In Iowa it was held that the statute constituted a "Bill of Attainder," whereupon the Legislature re-enacted the law, so framing its provisions as to escape the consequences of this judgment. In Washington, New York, and New Jersey, the law was held to be unconstitutional, on the technical ground that it constituted "class legislation." In no case has a judgment been pronounced against the Bill on its merits, and in nearly every case where the courts have pronounced the Act void it has been re-passed, as in Iowa, in such form as to enable it to comply with constitutional provisions. Thus also, in some States where the law was vetoed by the Governor, it has been re-enacted by the Legislature. Difficulty has been experienced in ascertaining the results of this class of legislation. The law provides in nearly every instance that, after the operation has been performed, the fact of the operation and the results of the observations on the health and condition of the person who has been operated upon shall be transmitted at stated periods to the Governor of the State. Naturally these reports are confidential, and are therefore not accessible to the public. But I have been able to ascertain that the total number of operations slightly exceeds 2,000, taking all the States together, and are distributed as follows—

California	1697
Connecticut	12
Indiana	118
Iowa	67
Kansas	3
Nebraska	25
New York	9
North Dakota	32
Washington	1
Wisconsin	61
Total	2025

Dr. John Randolph Haynes, of Los Angeles, California, has obtained, within the past two or three months, information from the physicians in charge of the insane asylums, prisons and reformatories in California as to the working of the Act in that State. There are six insane asylums and one institution for the feeble-minded in California, and it is in these institutions that the 1697 operations had been performed up to August 27th last. It is interesting to note that in the Stockton Hospital, of the 722 cases treated, 534 were men and 188 women. In the Mendocino Hospital twelve men and nine women were treated. In the Nappa Hospital fifty men were treated and eight women. On the other hand, in the Agnews State Hospital forty females and only seven men were treated. In one of the State prisons three men were sterilised at their own request. In the case of Reform Schools, the law does not provide for, or permit, sterilisation, but feeble-minded children for whom the operation is desirable are sent to one of the larger institutions for the benefit of operation there. While I make these statements as to the laws of the United States for the protection of the community, and to ensure that mothers shall be protected in order to enable them to beget healthy offspring, and to prevent the increasing birth of children liable to swell the figures of the infantile death-rate, I am not in a position to express more than a general opinion upon the results of the various Acts. I cannot, however, refrain from stating that there seems to be a general consensus of opinion, so far as my examinations go, that the laws in favour of sterilisation are beneficent in their character and of great advantage and benefit to the persons operated upon, and of still larger advantage to the general community. As far as my observation goes, and I have given considerable attention to it during the last few years, there is a feeling in favour of a sterilisation law growing from State to State, and it is not improbable that it will continue to grow.

1. THE CHAIRMAN. Will you tell me—these people who were sterilised, were they done in anticipation of their release from institutions?—Not always. I have figures here given by the forerunner of this reform, and he states that in most of these institutions the patients are permitted to go out with the idea that they shall be recalled if their conduct makes it harmful to the community for them to be at large. He states that of 114 men who had been operated upon under the provisions of the Act within a given period, fifty-two were satisfactory during the existence of their parole and four only were unsatisfactory. I think he was in charge of a reformatory, and that these men were degenerates. They may have been in the insane ward. They would have been released in the ordinary course of events, as they were behaving themselves more or less properly, and their friends wanted them out, but before letting them out, as a precautionary measure they were sterilised.

2. Colonel Bond made some experimental observations some years ago which seem to suggest that when you perform vasectomy you ultimately lead to interference with the testicles, so that they degenerate, and it leads to castration. Can you say anything about that?—I have only the pamphlet by Dr. Sharp, and he claims that that is not the result. He claims that the operation is of so simple a character that it is performed without anæsthetic, and the patient almost immediately afterwards goes about his business as usual. It does not impair his health or reduce whatever vitality there may be in the generating organs.

3. SIR EDWARD BRABROOK. I think you mentioned the proportion between birth and affiliation orders in England?—Not England, but Norway.

4. I was going to found upon that a question as to whether an affiliation order is necessary in every case of illegitimacy? There are many illegitimate fathers who do not desert the mother and child, and in those cases no order would be necessary. It is only as a kind of penal condition that we get affiliation orders?—According to my observation, the proportion of cases in which support is given by the father is very small in relation to the large number of illegitimate children born.

5. There can be no statistics on the subject. These very drastic measures which you speak of apply in several of the States of America, but I suppose the time has not yet arrived to allow of ascertaining what the full results may be? There must be many objections to such drastic laws?—The operations have been, until quite recently, with the con-

sent of those operated upon, and have been carried on for nearly twenty years, but not in large numbers. It has only become lawful to perform it against the will of the subject within, say, seven or eight years, but it has spread so rapidly that it embraces half the States of the United States.

6. MGR. PROV. BROWN. As to the decrease in illegitimate births in Queensland and Norway, do you attribute that to the working of the law, or may it not be due to preventive methods on the part of those having intercourse?—I cannot say. I rather think as regards the law in Wisconsin *re* preventing the granting of marriage licences to people with venereal diseases, that the very fact of the passing of the Act has drawn people's attention to the serious consequences, and for that reason I imagine there may be a decrease of illegitimacy because the general subject was being commented upon by the community.

7. If you make the consequences to the man of getting illegitimate children more penal, he would try to avoid those consequences?—That is obvious. There have been brought before the Council with which I am connected statements by many people who are doing what they can to protect unmarried mothers and look after their children, and it seems to be the consensus of opinion that with those who beget illegitimates there is no calculation, and that it is not due to vice so much as to the unexpected giving way to the impulses of passion. I therefore do not think that Acts of legislation would largely diminish the number of illegitimate births.

8. Illegitimacy is due to the act of two people, and you think that even with the consequences before him, the man would not be likely to have so much forethought as to try to prevent conception?—Education, the inculcation of morals, and the spread of religion might lessen, but would not avoid, illegitimacy.

9. Do I understand that in New York State no marriage can take place unless a certificate is put in by the parties that they are free from venereal disease?—Yes. That certificate is lodged with the application for the marriage licence.

10. Are people prosecuted who decline to do it?—The law is not more than eighteen months old yet, and I cannot say; statistics are not available at this distance. I am making inquiries to ascertain how far all these laws are executed.

11. THE SECRETARY. You assume that a law in New York recently passed must necessarily be in force?—I

wish I could, but there is so much winking at wrongdoing there.

12. Dr. Marie Stopes. About the action of the Comstock laws: no information about birth restriction methods may be sent by mail, and there can be no publications about it. If birth control methods for married people are absolutely prohibited, how is it that they can do so much more about sterilisation?—The Comstock Act is only an Act for New York. Comstock lived in New York and carried on his campaign there. There are certain Acts passed, perhaps as a result of his exertions, by Congress which prevent the transmission through the public post, the mails, of indecent matter; but that has raised the great question as to what is, and what is not, indecent matter. I have no knowledge myself of there being any prevention of the transmission through the mails of matter relating to, or of any honest, legitimate discussion of, the process of child-birth. Don't you mean the prevention of conception?

13. Yes; and no publication, even by medical men, is allowed. It is surprising that they will tolerate sterilisation. In the passing of these laws do they have a discussion as to what sterilisation means?—I endeavoured to get at what was behind the movement, and I particularly inquired whether any society or organisation or public movement procured the passage of these Acts. My replies generally have been in the negative, and that, on the contrary, they were deemed beneficial laws by the heads of those institutions which had to do with degenerates. It was at their instance that the Acts were passed. Naturally there must be some public discussion, because no Act can be passed with closed doors: every Act must be introduced in the two Houses of the State Legislature, and there is a discussion on the second or third reading of the Act. The Acts are all published afterwards.

14. Dr. Routh. I gather that in some of the States, at all events, of the United States pregnancy is compulsorily notifiable?—No; you will not find that in any State or any colony; only in Norway.

15. Dr. Marie Stopes. Legitimate?—No, only illegitimate, and that is in order that the reputed father may bear the expense ordinarily defrayed by the husband in the case of married people.

16. Dr. Routh. Is there any State in the United States where the doctor is obliged to notify venereal disease?—I am of the impression that there are two or three States where it is necessary.

17. For those contemplating marriage, certificates declaring freedom from venereal disease are necessary in six States?—More than that, I think.

18. As regards sterilisation, in California, where, out of 2000 cases, 1697 were in asylums, they were done without the consent of the patients?—Yes.

19. So only 300 out of the 2000 were done with consent?—No, all the 2000 were without consent; those with consent are not included. The law makes it compulsory, and the subject on whom the operation is performed has nothing to say about it.

20. Have you any statistics about operations performed with consent?—No, or only a few, which I extracted from Dr. Sharp's pamphlet.

21. These operations for sterilisation, do they involve in any large proportion impotence?—Yes—I do not know the medical definition of "impotence."

22. Would it cure their sexual pervertions?—It would prevent them having any harmful fruit. The feeble-minded have keener passions than those of sane mind: they have less restraint, and their intercourse does beget feeble-minded children. In a family of three or four children the majority might be abnormal, and the desire is to prevent the production of abnormal and diseased children and degenerates.

23. COLONEL BOND. What age do they fix for children to be taken from one institution to another for the operation?—I do not know. They say these children who were operated upon were hopelessly abnormal.

ELEVENTH DAY

Monday, December 9, 1918

REV. PRINCIPAL GARVIE, M.A., D.D., in the Chair

THE following précis of arguments and evidence was laid before the Commission by Mr. Cecil Chapman, the Metropolitan Magistrate—

"(1) Permanently separated persons must have either illegitimate children or none, and, judging from the returns of illegitimacy, it would seem that the majority of those who live in concubinage are careful to prevent their union from resulting in the birth of children.

"(2) Illegitimate children are the most neglected portion

of the community, and their death-rate is at least one hundred per cent. higher than that of legitimate children.

"(3) Illegitimacy is very rare indeed amongst those who can afford to pay for a divorce when they are entitled to one, and comparatively common amongst those who have been compelled to accept permanent separation as the only remedy for breach of the marriage tie.

"(4) It cannot be doubted that the low standard of morality for man has been fostered by the law which prevents a woman obtaining a divorce on the ground of her husband's immorality, and illegitimacy is greatly due to the low standard of morality for men compared with that of women.

"(5) The comparative impunity with which men are guilty of adultery is gravely increased by the law which refuses divorce for permanent desertion without adultery, so that to obtain freedom to marry again and beget legitimate children men are often compelled to commit, or go through the form of, adultery against their natural inclination.

"(6) The belief that persons separated by law or by agreement are commonly reconciled after a lapse of time is fallacious, and disproved by the statistics of courts where alimony is ordered to be paid to the aggrieved wife through the court.

"(7) Those who resist the desire for divorce upon this belief are not only deceiving themselves, but are ignoring all the immorality and misery which result from permanent separations without hope of re-marriage at the end of a certain period.

"(8) The confusion of thought which makes people think of divorce as an evil in itself, instead of a remedy universally adopted by mankind for evils inflicted upon innocent persons, is the main obstacle to progress in the sphere of morality. This confusion of thought has been created by pious people who believe that the nation's social and political life is regulated by Scripture, and is encouraged by the persecution of innocent persons who avail themselves of the right of divorce, which has been established by law for seventy years. We cannot expect to increase legitimate birth-rate, or make any progress in morality or reverence for marriage, till we have destroyed this confusion of thought.

"(9) The practically universal experience of magistrates is that permanent separations without the hope of re-marriage lead always to immorality, and commonly to misery besides, and are an obvious hindrance to the birth of legitimate children and respect for the marriage tie."

Statement

The reason I came here, accepting your invitation to give evidence, is that my days are occupied practically at the Westminster Police Court, in the same way as they used to be at the Tower Bridge Police Court, in witnessing the result for people who have been separated by our courts or by their agreements and subsequently live lives of immorality, or, in some cases, of women who, owing to the necessity of economic distress, have taken to lives of prostitution. Every one connected with my court who is experienced in social work, when we try to arrive at something which would diminish immorality, not only amongst the women, upon whom too much blame ought not to be placed, but also amongst men, is of opinion the standard of immorality for men is so low that the women look upon it as taken for granted, and when they come out to solicit, they look upon themselves as simply supplying a demand. The magistrates and the missionaries and the Probation Officers have constantly met together to consider what ought to, or could be done to diminish the volume of immorality which comes before us, and one of the things which we have thought most likely to produce it, was to give the poor the same facilities as the rich have of putting an end to marriage, in such a way as to enable those who wish, to be honestly married and bear children, when they have the opportunity of doing it. At present the poor are debarred from doing it owing to the expense of the Law Courts. Then, again, we have come quite definitely to the conclusion—and I have not found a dissentient voice amongst the missionaries of London—that the separations which we grant as magistrates are admittedly granted for reasons which make it almost dangerous to allow the husband and wife to remain together. There is either cruelty by violence or what amounts to a very gross form of cruelty—the imparting of venereal disease on the part of the male spouse, and in a very large majority of cases there is immorality on the part of the man, for which our court provides no remedy. These cases come before our courts, and I have had experience where not only has the husband been unfaithful, but it is rather vulgarly supposed that a woman ought to overlook it because she has no remedy in a Police Court. I entirely disagree with that view of the matter. We have had cases where husbands actually bring women into their own houses, and they defy me when a woman comes to ask for separation. He says: "You have no right to separate me, as I can be as immoral

as I like in my own house." He will also say: "My wife has no remedy; I have not struck her and I have not failed to supply her with a proper proportion of my wages. As long as I do that I can do what I like." I have told them that I would not allow it—that I would not allow a woman to go back to a man like that, as it is degrading to the dignity of woman and to the dignity of marriage. I treat such conduct as amounting to cruelty or desertion, because I believe that the higher respect you obtain for marriage and for the dignity of a married couple, the fewer illegitimate births are likely to be. I have done my best to find out from our missionaries what the effect of separation is. I daresay none of you are doubtful about it, because the evidence given before the Royal Commission was so overwhelming—that the effect of permanent separations without the chance of re-marriage is bad from a point of view of morality. I do not think there can be any dissentient opinion about that. That seems to me to be a matter upon which assumption might go a long way. If there is that immorality necessarily resulting from inability to marry honourably, it must result in either concubinage or celibacy. The effect of that upon the birth-rate is obvious. In our courts of late we have had a considerable number of bastardy orders to make, and we certainly have had a great increase in prostitution, but looking at the statistics of illegitimate births, I find that, according to the Somerset House statistics, the rate of illegitimate births remains very much the same up to 1917, and seems to be rather on the increase in 1918. In 1917 there were 37,000 illegitimate births registered in England and Wales in a year, and that is no increase, because it has been 37,000 now for a great number of years. So, when recording the number of separated persons who have been unable to marry honourably, and have to live in concubinage, when they must produce, if any children at all, illegitimate children, it is very curious to realise that the rate or the number of illegitimate children is comparatively the same. I do not know how this happens, but I suppose that separated persons take physical means to prevent their having children—otherwise there would be a considerable number more than 37,000 illegitimate children born in a year. In regard to the numbers of persons separated, there have been differences of opinion—rather wide of each other—but whatever the numbers are, they cannot be less than several thousands a year, something like 20,000 a year, if it is not 50,000. When you multiply that, you can see, if the separations are continued for ten years—and many are

continued for much longer—that the number who are actually living separated lives becomes very large. As you all know, the evils associated with persons leading these lives are so bad that there is not one of us who does not shrink with horror at the result of illegitimate births or the misery of persons living in concubinage, especially the women, who have to bear the abuse of their neighbours and the finger of scorn pointing at them. I am constantly having before me cases of abuse and insult owing to persons being reported as living in concubinage and not properly married. When you realise the numbers—I would not have you exaggerate them—don't for a moment doubt that in every case those separations are associated with misery and immorality. Of course it is obvious that during that period of separation the number of illegitimate births recorded by the Registrar-General is very small, considering the number of people who are living separated lives. We must suppose, therefore, that they are taking some physical means of preventing births altogether. There is tragedy in preventing a return to moral conditions. I realised this at Tower Bridge more than at Westminster, because I had a lady there who was particularly interested in the subject, and she used to give year by year the number of people who, if they could, would get out of the state of concubinage, which they disliked, and try to be married to the man with whom they were living faithfully. I daresay you have heard of a number of men and women who have asked when they can be allowed to re-marry, because each one is wanting to do so, and keeping themselves in hand in order to live in a condition of self-respect, and not submit to the downfall from their original standard of morality. Both men and women have so written to me on many occasions, and have waited for years for the opportunity of marrying the person they love. They are not allowed to—the law does not permit it, and the result is that there is much less legitimate birth than there ought to be, and there is a considerable amount more of illegitimate birth than there ought to be. Now the chance of these illegitimate children surviving is not so great as that of legitimate children. They are the most neglected portion of the community, and their death-rate is at least a hundred per cent. higher than that of legitimate children. I think that must come home to you as something to be fought against—that the illegitimate children are neglected and persecuted, apart from the loneliness which they suffer from having a mother who is ashamed to own them. They have been literally persecuted in such a way that if nature

does not relieve their parents of them by natural means in infancy, they are apt to die as the result of accumulated hardships. It is a cruel case, and I doubt if there is anything more pitiful in the world than the lot of illegitimate children. They have done no harm, and it is a wicked thing that they should be allowed to suffer as they do. Therefore the more illegitimate children there are in the State, the more anxious ought the State to be to enable the parents to marry honourably as soon as possible, unless they have got some good ground against it. I remember receiving a letter from the Archbishop of Canterbury some time ago to the effect that those who, like myself, advocated the change of a right to separation into a right to divorce, omitted to consider the number of reconciliations which took place between separated persons. The Archbishop was not quite fair to persons like me. We do not admit it; on the contrary, the missionaries are engaged very much in trying to patch up quarrels between the men and the women who come to the court for advice, so as to prevent their recourse to a magistrate by settling their differences; and they follow up cases of separation to make reconciliation if possible. We know for certain what kind of success attends these efforts, but there are certain differences of opinion as to the numbers who become reconciled. I have heard it stated—and it was stated in the House of Lords the other day—that reconciliation of separated persons separated at the Police Court amounted to something like seventy-five per cent. Of course that figure is purely fantastical, as there are no recorded figures, but I have taken as great pains as I can to reach accuracy. I have been round to the Police Courts and I have interviewed the missionaries and the Probation Officers who have visited the poor. I have written to a large number of missionaries as well, and all I can say is that every one of those persons—and they are all people of experience, deeply interested in obtaining reconciliation—give it as a general opinion that ten per cent. of reconciliation is the highest that can safely be relied upon. And this ten per cent. they consider a rather high figure, and there are cases of reconciliation which I hope the opponents of Lord Buckmaster's Bill will take note of. I refer to cases where women have been forced by economic necessity to yield to the pressure of the husband, who says, in effect: "Well, you are starving now; if you come to me you will have enough to eat and the children will have something to put into their mouths," and the wife has gone back to the man after having been separated by the court for a year or even two years. And instead of it being a happier

state of things, or a real reconciliation, it has ended in the husband saying: "Now I will pay you out for leaving me," and he has made her life infinitely worse than before, and she has come back to the court with the following complaint: "I took him back; your missionary advised me to try it; and instead of being better, he is worse, because he says he will punish me for the first separation." Don't lay too much stress upon the idea that separated couples come back again in an honourable fashion to any extent which is really worth considering. You will be deceiving yourself if you take that view. What I wish to emphasise is, that whatever the numbers are of those who are reconciled, and however small the numbers are that are living in permanent separation, it is wholly unjust to leave those people without a remedy for the miseries which they suffer. Half of them are presumably absolutely innocent of offence, and you are leaving them in an intolerable position simply because the partner with whom they had agreed to spend their lives turns out to be a scoundrel. I ask, whatever the numbers are—supposing we reduce them to one thousand—is it right to allow that injustice? Well, here is a case which seems to me—and to my fellow-magistrates and everybody I know of associated with the administration of the law—to cry out for redress, because of the injustice of it to at least half the separated persons; and you cannot remove that grievance until you give those people the right to marry again. You may hedge the right with whatever conditions you please in order to safeguard the conditions of the woman and the children, but I do want you to bear this in mind: that you don't increase the reverence or the veneration of marriage because you make it irrevocable. The result of your present state of the law is that marriage is held in contempt; concubinage is thought to be as good as marriage, simply because marriage has become impossible, and so many people in other respects perfectly honourable are living in concubinage. A clergyman friend of mine told me that in a large dwelling close to his house he did not think there was a single couple who were not living in concubinage—the majority, at any rate. He said that that was the report his visitor brought back to him, and he assured me that there was no married couple discovered by him in that dwelling at the time he called. It shows how easily marriage comes to be disregarded, and how people lose the sense of veneration for it when they see many of their neighbours living without marriage and suffering small inconvenience. There is one other point which I have not alluded to. Assuming the change referred to in

order to avoid the evils associated with irregular relationship, what grounds have we got for believing that persons would avail themselves of the right to re-marry? Well, upon that ground we have the statistics which were given before the Royal Commission dealing with Divorce; these statistics show that fifty per cent. of divorced persons do re-marry. That is Lord Gorrell's summary of evidence on the question. You might assume that quite fifty per cent. of those separated people would avail themselves of the right to re-marry, but I feel sure there would be a far greater number of the people separated than those divorced, who would avail themselves of the right to re-marry, for the simple reason that separated persons have often not been into a court to air their grievances, but have been living pure and self-controlled lives in order that they might eventually marry the persons whom they desire to marry in an honourable way. There are many cases of that sort in separations which you would not find in divorces, where there has been infidelity on one side and sometimes by necessity on both.

1. THE CHAIRMAN. You would admit, I suppose, that your experience is to a certain extent a one-sided experience—the experience of the Police Court dealing with these separations? It does not cover the whole ground which would have to be covered and taken in view in dealing with a question affecting the whole nation?—Certainly, I agree, and because of the size of the black spot with which I deal I say there is plenty of reason why, in the interests of the nation, that black spot should be wiped out. My eyes, it is true, are concentrated on a limited spot, still, it is so far-reaching that it permeates the whole nation.

2. You have not brought out the distinction, which for some of us seems to be a very vital distinction, between a legal separation and a separation by agreement. Do you think that divorce should follow on separation by agreement just as easily as it follows on legal separation?—My first inclination was to say "No," but my more recent examination of these cases has converted me to another view—that if persons have agreed to separate for reasons which can be ascertained, and should be ascertained before divorce was granted, in a great many cases—I should think in three cases out of four—the reasons for which separations are made by agreement are practically identical with the reasons for which they are given in a court, but the parties, owing to their sensitiveness or their positions, have refrained or been afraid to come into the courts. I speak now with experience, and I know many solicitors who have

drawn up agreements of that kind, and they have always assured me that one of their great difficulties is to make the reasons for agreed separation truthful and at the same time sufficiently strong to justify the agreed separation. The real truth is always worse than that which appears in the deed, because one of the conditions often is: "I won't have my infidelity put in or my cruelty inserted in the deed, or, if you do, I won't agree to give you £5000." It is a very common thing that deeds of agreement which appear to be merely the work of the moment are really the result of intense, anxious, painful considerations on the part of both parties.

3. You would say that even the reasons behind the desire are much graver reasons than are ever put in the document? —I think you will find that is invariably the case if you ask the solicitors who are usually engaged in these cases.

4. Before you allow separation by agreement to lead to divorce, you would require that adequate reasons for the separation should be stated in court?—I think a time limit is a very fair test of those people coming together again. I never can believe that people will remain separated, if they have children, for so long a period as five years, which was the time proposed by Lord Buckmaster's Bill. I do not think that people would remain apart and separated by deed unless there was some grave cause, and therefore at present I am prepared to accept the time limit.

5. You say that your conviction is that easier divorce does not necessarily result in moral laxity?—Yes, I do, absolutely; but with this reservation: that the cause for that divorce must not be frivolous.

6. Would you consider that women suffer a great deal of injustice and cruelty from their husbands because of the difficulty of securing a divorce?—I am quite confident of that.

7. And men take cover, so to speak, under the law to keep a woman as their victim?—I am perfectly sure of it, and I really do think we exaggerate the duty of the wife to submit to the martyrdom of marriage under those circumstances. If you make it a virtue to submit to things which are very often dishonourable for them to submit to, it is not right.

8. You will admit that divorced parents will affect injuriously the children, and the children would have neither mother nor father to look after them, and therefore they would be less happy?—That is so. That is a matter I have considered many times, and the life of children is not happy where they have to live with parents who are

always living in a state of quarrelling and bickering. I remember staying with a family where the husband had not addressed a single word to his wife for twenty years, and whatever the wife had to say to the husband it had to be said through the children, and vice versa. Think of the condition of life of those children, forced to live or to remain with parents who are on those sort of terms! It is not a happy condition of things, and I think it is happier for them to have the opportunity of going to live with one of the parents for a few months, and then to live with the other parent for a few months, if that seems desirable.

9. You would recognise, I suppose, that for a religious community, acting for religious motives, it would be quite legitimate to lay down certain requirements for marriage for their own members, apart from the State?—Quite; I entirely agree.

Twelfth Day

Monday, January 6, 1919

The Bishop of Birmingham in the Chair

Statement of Dr. T. H. C. Stevenson

There are at present in existence in this country a large number, constantly being added to, of partial registers of the population, but the census remains the only complete register, and it, being only revised once in ten years, is of use only for statistical purposes. The partial registers are very numerous, including at present the National Register, Food Register, Electoral Registers, School Attendance Registers, Sickness and Unemployment Insurance Registers, and many others. All these are, generally speaking, independently compiled and maintained, the information obtained by one not being made available for the purposes of the others. Take, for instance, the removal of an engineer with his wife and family from one town to another in the course of his employment. The local education authority is so much interested in the matter that in London and some other towns an elaborate system is maintained for acquiring knowledge of such changes, by means of house-to-house canvassing, reports from districts of departure, and so forth, the staff required being very considerable. The Electoral Registration Officer is also interested, as the

responsibility of placing the man, and perhaps his wife or other electors in his family, upon the electoral register of the new area falls upon him. This duty is to be carried out by means of a six-monthly canvass, and other methods involving heavy expenditure. The National Register endeavours to get information of the removal by casting the duty of its notification to it upon the engineer and his family. This is comparatively cheap, but not always effective. The Health Insurance Register is content to wait for news of the removal till the man chooses a panel doctor in the new area, which may not be for years after his removal, if his health has been satisfactory in the meantime. The Unemployment Insurance Register, which is concerned with all workmen engineers, depends upon the self-interest of the insured man to obtain its knowledge of his whereabouts, but even this is not found wholly satisfactory. The Ministry of National Service has till recently been concerned to get any males of military age in the family on the Recruiting Register of the new area, and it remains to be seen what success will attend the efforts to be made at the Peace Conference to avoid this necessity in future. For this purpose it depended primarily upon information communicated by the National Register, which was itself often at fault. The Food Register is also concerned, but its requirements are temporary, and there is no difficulty in securing their fulfilment by the persons concerned, with ration-books as the inducement. In addition to this list of Registers, all of which are certainly or probably concerned with the removal, many others may be, such as those dealing with War Pensions, Old Age Pensions, Vaccination, Infant Welfare, Tuberculosis, Infectious Disease, Aliens, etc. The number cannot be accurately defined, but it is large, and, except in the case of the Military Register quoted above, the present practice is for each to obtain its own information as if no other were concerned. The question of registration has, in fact, never been faced as a whole, its unity seemingly not having been recognised. The proposal favoured by the Registrar-General, which he has foreshadowed in one or two recent addresses at the Royal Statistical Society and elsewhere, but for which the Government is not in any way responsible, as it has not yet been officially considered, is that this should now be done by the establishment of a single master register, which would be complete in the sense of including every man, woman, and child in the country. It would contain certain particulars of general interest about each, such as address, name, sex, date and place of

birth, and occupation, with information as to marriage and children. But no single register could possibly contain all the information that may be wanted for its own special purposes by any one of the multifarious records referred to. The proposal is, therefore, to link each of these up with the general register as part of a single co-ordinated system, providing for the communication to each of the special registers of the information of common interest collected by the general register, and leaving each of them to amplify that as their own requirements may indicate. With this object, the general register might record, in code form, upon which of the special registers the person was borne, and information of removals, etc., would be communicated to these as received. The general register should alone have a complete convassing organisation, none of the others requiring to start *de novo*, but merely to fill in gaps in their knowledge concerning certain individuals. This would put the special registers on a much sounder basis, providing for them automatic knowledge of removals and adequate identification of individuals, the lack of which are the main difficulties in the way of most registration systems at the present time. The general register would also have important uses itself, apart from its various satellites. It would provide for the first time satisfactory data of population in each area as it fluctuates from year to year, which is very necessary for many purposes. It would, in fact, form a curtailed yearly or six-monthly census, which could be expanded at intervals to the dimensions of a decennial census immensely increased in value by the continuity of record involved, as this would eliminate most of the sources of error affecting the present system. And there can be little doubt that in various other ways the existence of such a register would be of use for various purposes, *e. g.* in connection with health administration and housing and transport schemes, while, as has recently been demonstrated, it might be most useful to meet sudden calls in periods of national emergency. As the register would deal with many millions of names, it would have to be maintained, like the present National Register, in local sections through the country. To prevent the risk of any person being borne upon more than one local register at one time, it would be necessary to maintain a single central index to all the local registers, containing a slip for each inhabitant of the country, which would distinguish him from all others, and indicate on which local register he was at the time borne. Births, deaths and removals would all be reported to this index, a slip being

added for each birth, and removed for each death. The central organisation should co-ordinate and control the local general registers, securing that no name was added after a removal to any local register till the corresponding form had been received from the district of former residence. This central index would itself serve useful subsidiary purposes besides its primary function of keying together the local sections of the register. It would, for instance, provide the means of ascertaining at any time the residence of any person in the country whose identity could be adequately described, thereby solving certain difficulties in the administration of the law. As it would necessarily be connected with the registration of births, deaths, and marriages, each of these events could be recorded upon the index slips, thus providing means, at present almost entirely lacking, of linking up the information obtained under these heads. A man's slip might record the date and place of his birth, with the names and dates of birth and marriage of his parents, all derived from an improved birth certificate. Then the date and place of his marriage, with name and date of birth of his wife, would be added from the marriage certificate; and later, as occasion arose, the sex, name and date of birth of each child. Nearly all this information is at present being recorded, but no machinery exists for its collation. Under the scheme indicated, eugenists would, in course of time, be provided with pedigree records of the population comparable in accuracy with those already provided for prize livestock; and the field for research could be indefinitely extended by tracing the records of the progeny of various unions from central index to general register, with its fuller information, and from that to any of the special registers concerned. No system of population registration comparable in completeness with that outlined above is as yet in existence in any country, but several continental countries have schemes in operation. These are in all cases local, the separate areas maintaining their registers more or less independently of each other. In the absence of a central index, schemes for inter-communication of information are found to work very imperfectly, and as arrivals are nearly always better reported than departures, the registers tend to become swollen by retention of names of former residents until a check is provided by a new census. This is especially the case where, as is the usual rule, the law is merely adoptive, and registers are maintained only by certain towns, which thus can receive support, in the form of information of arrivals and departures, only from such

other areas as have adopted the law. In Holland, Belgium and Italy alone has the law been made of universal application as yet.

1. THE CHAIRMAN. You say that the census remains the only complete register. Would you amplify that?—It is the only record that contains particulars as to each individual in the country.

2. These particulars are not very detailed?—They are detailed in some respects. In many respects no information is required.

3. Do you think that the census gives the particulars that are really important to the social reformer in regard to the individual?—It necessarily omits many subjects which we should like to insert, but with the present methods, or the methods which have been in use heretofore, it is impossible to extend the scope of the census indefinitely, and we have come to the conclusion that we have about reached the limits for the time being of what can be wisely included.

4. You think, as a whole, that what is now in the census is as much as you can reasonably demand from the individual?—It is quite possible that the questions might be improved, but I do not think that it is possible, with present methods of conducting the inquiry, to increase the volume of information.

5. And of that volume you think nothing can be omitted which could be better supplied by something else?—Yes, I think I do. Before the last census the Registrar-General made representations as to the inadvisability of including questions with regard to mental or physical deficiency, but that point of view was not accepted and the questions remained. We feel it is hopeless to expect from a father information as to his child's mental defect or hard hearing or whatever the trouble may be.

6. You think the responsibility of the census must always fall upon the father of the family or whoever represents him?—No, I should not say that. It always has done so in this country hitherto, but I feel personally that if we are to make much progress in regard to census inquiries a change must be made in that respect.

7. Would you place upon anybody in connection with education any duties in regard to children?—I think it would be difficult to incorporate returns from school teachers in a census inquiry.

8. How would you get mental deficiency brought out?—In time there will be records from the educational side on

this matter, and it should be possible, under a proper statistical system, to correlate these figures with the register of population.

9. The partial registers that are very numerous are very often *ad hoc?*—Yes, as a rule.

10. Therefore they cease at particular times and are started again at other times?—Those referred to here are, for the most part, of a permanent nature—the School Attendance Register and the Electoral Register are permanent; the National Register was a war emergency matter, and will presumably cease; the Health Insurance Register is permanent; the Unemployment Register is permanent; the Food Register is temporary.

11. You say in your paper: "It remains to be seen what success will attend the efforts to be made at the Peace Conference to avoid this necessity in future"?—That is an allusion to the declared policy of this country to obtain an international agreement against conscription. If conscription continues to be the rule, presumably the military authorities will be interested in the maintenance of something in the shape of a National Register, from which they can quickly complete their recruiting register.

12. Would you explain the Registrar-General's proposal referred to at the bottom of your paper?—The point that has struck us since we began to give special attention to this matter is that, although there is this large number of registers, many of them including large sections of the population, still the work of each is done absolutely independently. That may not always be literally true, but it expresses the general facts, and consequently there is a repetition of work that has already been done by another authority, or, failing that, inefficiency. The occasion that gives rise to most of the difficulty is the removal of registered persons from one area to another. At the present time either the register makes an effort, by canvassing or otherwise, to obtain knowledge of removals, or it decides to do the best it can without that knowledge, until it is more or less accidentally brought in its way. You get the alternative there of a great deal of expense gone to, and a large staff employed, or of the work of registration suffering in efficiency through the inability to incur that expense. The gist of the Registrar-General's proposal is that this work of maintaining the population register of each locality, tracing removals and seeing that they are entered upon the register, should be undertaken for the whole population by a single register, which should communicate its results to all the existing

registers, which would be linked up to it by mechanism which is briefly referred to in my paper. If the work is done once and for all, it is possible to devote to it an amount of energy and a staff which is almost out of the question under other circumstances. In that way you would ensure that the results of such an undertaking are available for all the registers in existence, including those which at the present time necessarily often go for long periods in want of information which they require. What made the proposal first appear one of practical possibility was the new electoral law, with its six-monthly canvass of the twenty million or so voters in the population. That necessarily entails very heavy expenditure, as it deals with almost half the population. The suggestion is, that when you are going round the streets of the towns, and visiting practically every house to get voters' names on your register, you might make the thing comprehensive, and do it for all purposes without proportionately additional expense.

13. You would have to educate public opinion a little?—On the whole, experience has shown in war-time that less difficulty has been met with in registration matters than might have been expected.

14. Rev. A. E. Garvie. This proposal contemplates a central register. Would it not be an advantage to know what a man's relation to employment insurance was, or would that be too vast an undertaking?—I think the most practical way of dealing with that would be to allow the insurance authorities to deal with their own information. I think it would be quite impossible to get any proposal passed that would take insurance matters out of the hands of the Insurance Commissioners.

15. Would it not be possible to co-ordinate the information gained by the different authorities, so as to have a complete record of each individual?—It might come to that in time, but I think that is looking a long way ahead.

16. Dr. Saleeby. I think you have been having a kind of inter-departmental discussion on this for some time past?—Yes.

17. And what you are putting forward pretty well represents their considered opinion?—I would rather put this before you as our view, because the Committee to which you refer to has not yet reported.

18. You would say there never was so good a moment for so excellent a step forward as this?—That is undoubtedly true because of the sugar-cards and the National Register being still in existence. An essential condition of any such

scheme is the accustoming of our population to the preservation of means of identification. Throughout the war they have done that, and the present moment is opportune to get the practice put upon a permanent basis.

19. Your proposal supersedes and transcends the familiar proposal of a centennial census, or one in every five years?—Quite so, because you will have one every six months.

20. It supersedes the proposal of a census immediately after the war. What is your relation to that proposal?—I think a census now would be of comparatively little benefit, because the conditions of affairs at the moment is so transitory that before the results of the census could be tabulated they would be hopelessly out of date.

21. Would the proposal require legislation?—Certainly.

22. Dr. Amand Routh. Do all the different bodies who are taking a local census communicate their results to the Registrar-General?—Are you referring to such an organisations as Health Insurance?

23. Yes.—No, they have nothing to do with the Registrar-General at all.

24. Supposing your plan was adopted, and we wanted to make a census throughout the country, does that mean a local agent in every small area at increased expense?—The proposal would be to work the thing more or less on the lines of the present National Register, putting it in the hands of the local authorities in the country, though perhaps not going down to the smaller urban and rural districts as is done with the National Register, so that the register would be a local Government organisation co-ordinated and controlled at a central office.

25. Would that save these various bodies what they are doing now for their own purposes?—In the case of the Electoral Register, for instance, it would save a canvass which is costing a very considerable sum every year. It would also save the work of tracing the movements of school children. It would do the work of the special register authorities for them so far as their work at present consists in tracing the removals of the population.

26. You say such a scheme would help us to obtain pedigree records. Would that have any reference to the health of any particular series?—In so far as records of health are registered at all, in the future, under such a general scheme as this, it would be possible to bring the health records into relation with the pedigree records, because they would all form part of a single scheme.

27. There is no suggestion that the cause of death should

be included in the records?—It is not possible to put everything in a short, condensed statement, but that matter would be particularly easy, because the same central office would be dealing with the central index, and with the records of the cause of death. All the information would be recorded and tabulated, and under this scheme any one item could be considered in relation to any other item.

28. COLONEL BOND. Is it suggested that the anthropometric survey census should be made independent of this, and that the information collected should then be given to the general register, or that the information for the anthropometric survey should be obtained from the general register?—The proposals for the anthropometric are still, I think, in too early a stage for us to have framed any ideas as to what the relation between the two would be.

29. How far do you think that this revitalised register would help in the future problem of eugenics?—I should have thought, with a record of the ancestry and parentage of the population, it would enable the facts of pedigree to be correlated with all sorts of other facts relating to the population, and that would be of immense importance.

30. Do you think it is urgently necessary that death certification should be brought up to date and modernised in order that it might come into this National Register?—The Registrar-General's proposals for reform in regard to death certification have been formulated and transmitted by him to his superiors for some considerable time, and they have been endorsed by various authorities, and the whole thing is largely a matter of overcoming inertia.

31. THE CHAIRMAN. Would the scheme delay further the issuing of the register, or would they be able to issue it more up to date in consequence?—The annual report, you mean? Physical conditions are against the annual report coming out much better than at present if its permanent value is not to suffer.

32. MISS MICHELMORE. Is the reference in your paper to panel doctors quite correct, seeing that the cards have to go in twice a year?—As I understand, there are two National Health Insurance Registers, one referring to the Societies and the other to the panel doctors, and I presume my statement would hold good for the register relating to the panel doctors.

33. There will be an immense amount of information with regard to health which they could easily get from the Approved Societies?—They will have the raw material, but, so far as I know, they have not yet tabulated it into statistics.

34. Dr. Marie Stopes. A large number of the working classes are extremely suspicious, and would be very hostile to any permanent register?—That is a point one always has in mind, but during the war work of this kind went much more smoothly than we had anticipated.

35. Sir Edward Brabrook. Does the proposal supersede the existing census altogether, or will you still keep the census on as a kind of check to the register?—The proposal is to make the census an elaboration of the register inquiry. I think it is a question of terms, whether you speak of superseding it or keeping it up. There would be a canvass for the census just as now, but in some particulars it would be elaborated. We have actually in existence at the present a canvass of the population every six months for electoral registration. Our proposal is, that when the canvasser is in the house asking about the father and mother, he should also ask about the children, and that would give you a six-monthly census in an elementary form. There would still be, every ten years or every five years, an inquiry having census requirements in view, as a periodical elaboration of the other. If, say, you have ten questions or five questions every six months, you might double that number for the decennial census.

36. The weakness of the census arrangement is that you have to get a scratch staff?—No one recognises that more than those who have to conduct the census.

37. Have you ever considered the possibility of what I might call a continuous census? Instead of taking a census of the whole country once every ten years, take one-tenth part of the country every year, and keep a permanent staff to do it?—I am afraid that would mean that the purposes of the census would cease to be served.

38. Is there to be nothing which a man or a woman or a child may keep private to himself or herself—no secret of his or her life which he or she has not to reveal to some Government official? Are we really prepared to ask every man and woman and child in the country to tell everything? —That is a matter which, I think, is not within the scope of the proposal, because this proposal does not increase in any way the information which it is proposed to require from the public: it only varies the form of requiring it.

39. The existing National Register stopped short at sixty-five. You propose it should be extended to everybody? —Yes.

40. Dr. Amand Routh. Would it not be possible, with the same staff who are doing the six-monthly or annual

register, to do the decennial elaboration?—That is the proposal, and there would be a trained staff.

The Commission adopted the following resolution: "That in the view of the National Birth-rate Commission there is immediate need for the improvement of the vital statistics upon which all its conclusions must be based, by the formation of a general register on the lines advocated by the Registrar-General."

THE MOTION was carried unanimously.

THIRTEENTH DAY

Monday, January 20, 1919

THE BISHOP OF BIRMINGHAM in the Chair

Statement of COLONEL C. J. BOND, A.M.S., C.M.G., F.R.C.S.

FOR my own information I drew up the following scheme, as it seemed to me it might be useful in considering the problems before this Commission. The problems really centre around a biological focus, that is to say, around what I have ventured to call the reproductive cycle.

SCHEME OF INQUIRY

Influence of Factors at different Stages of the Reproductive Cycle

(*a*) Germ-cells during development in the male and female sex-glands of the parent are affected by—	Racial poisons—syphilis, lead, alcohol. Zymotic diseases (some, *e. g.* mumps). Venereal disease and its control.
(*b*) Germ cells in the genital tract at the time of fertilisation.	Age of marriage. Prostitution as a cause of sterility. Contraceptives—chemical, mechanical. Diseases of genital tract.
(*c*) Fertilised ovum in utero.	Syphilis. Abortion—criminal, non-criminal. Pre-natal conditions.
(*d*) Fœtus of viable age. A consideration of the factors (hereditary and environmental) affecting the propagation and preservation of an adequate quality and quantity of human life.	Pre-natal conditions. Racial poisons. Death certification. Production of abortion—criminal, non-criminal.

(*e*) Infant during parturition.	Attention by doctor and midwife. Nursing. Illegitimacy (effect of). Registration, miscarriage. Other causes of mortality during labour.
(*f*) Infant up to twelve months.	Causes of infantile mortality. Economic burden of parenthood. Endowment of motherhood. Milk supply, breast and artificial feeding. Effect of illegitimacy.
(*g*) Child and adolescent up to reproductive age.	Zymotic and other disease. Environmental conditions. School clinics. Effect of occupation and environment on potential parenthood.

It is useful for us to regard our inquiry from the biological, as well as from the sociological point of view, and note each stage of the reproductive cycle when dealing with this problem of the provision of a supply of human life of adequate quantity, and of a quality which shall be not below a certain standard. If I may take the table *seriatim*, I venture to point out that this reproductive cycle begins with the development of the male and female germ-cells in the male and female parents, and from this point we work through the whole stage of reproduction and life preservation until we come to Stage G, at which the child reaches the age of adolescence (puberty), and becomes a potential parent and the germ-cells are again reproduced. A division of the cycle in this way gives us an opportunity of noticing the incidence of the sociological and biological factors which affect development and life production, and of allocating the influence of these different factors to the appropriate stages of the reproductive cycle. I think by such an analysis we get a clearer notion of where we stand, and in our inquiry may open up problems which may be worth inquiring into further at a later stage. Stages A, B, C, D, E are quite definite stages, and then we come to the somewhat arbitrary division in Stage F, covering the life of the infant from birth up to the age of twelve months. The age of one year has been chosen because it is during those early months that most infantile troubles flourish. The statistics of the Local Government Board and other institutions also embrace this period of infant life. The first twelve months of the infant's life are, in fact, one of peculiar danger and

difficulty. From this stage we pass to the child up to the reproductive age. In regard to Stage A, we must consider the sociological and biological factors in so far as they affect beneficially or prejudicially the germ-cells during development in the male and female parents. Of course we become at once concerned with the effect of the racial poisons, especially syphilis, and this brings up the whole problem of venereal disease and its control. Then we come to Stage B. This refers to the period at which the germ-cells leave the sex organs and are free in the genital passage of the male and female at the time of sexual intercourse. There are many influences which affect the successful union of healthy and vigorous germ-cells at this stage. One of these is the age of marriage, which, of course, vitally affects the question of fertility. A very important influence is that of prostitution as a cause of sterility or of diminished fertility, especially in the female. And then we come to one of the chief problems: the question of the voluntary restriction of the birth-rate, and the use of contraceptive measures of a mechanical and chemical kind. Then we have to consider the widely-prevalent gonorrhœal disease of the male, and especially of the female genital tract, and this brings up the question of reform of the Divorce Laws and reform in other directions. Stage C is concerned with the life of the fertilised ovum from the time of fertilisation while it occupies the womb. This stage will be especially dealt with by Dr. Routh. We are now concerned with some very important prejudicial factors which affect the life of this fertilised germ-cell, especially syphilis and the production of abortion, either by criminal means or by accident, or by any disease on the part of the mother which prejudices the life of the fertilised ovum. Criminal abortion can be produced by mechanical or chemical means, as by the taking of lead in the form of diachylon plaster. Abortion can also be brought on by too hard or unsuitable work. Then we pass to the fœtus as soon as it reaches a viable age. I have not put down any definite age. There, again, some ante-natal factors come in. The health of the mother, unsuitable labour, insufficient and improper feeding, as well as the various racial poisons, especially syphilis, come up at this stage, and here we should consider a problem which we have had before us, but which we have not yet fully considered—the question of the reform of the law affecting Death Certification, and the inclusion in some form of National Registration of these early miscarriages, about which we at present know so little in regard to numbers. Then we come

to State E, the infant at the time of parturition. Here arises the very big question of adequate and skilled attention by doctor, midwife and nurse—three most important factors. Here, also, we are concerned with the extent to which illegitimacy affects the prospect of survival of the infant at birth. Then we pass on to Stage F, which is concerned with the infant from the time of birth up to twelve months of age, and here, of course, we encounter the whole list of the factors which bring about the high infantile mortality up to the age of twelve months. Here, also, we come across another great problem, viz. that of the Economic Burden of Parenthood. Alongside that we have the problem as to whether or not there should be some form of endowment of motherhood. The question of a pure milk supply, and of breast and artificial feeding, are all-important at this stage. Finally, Stage G is concerned with the child after it has passed through these first twelve critical months, up to the age of puberty, when the adolescent arrives at the reproductive age and becomes a potential parent. The problems that affect this stage are very numerous and very important. There is the loss of life and the subsequent ill-health which arise from zymotic and other diseases; the faulty environmental conditions in which most of our young people live; the question of school clinics as an agency for the improvement of the health of adolescents, who from our point of view are, or may be, potential parents. Then there are the questions of anthropometric census, and a continuous National Register of health and disease, a Ministry of Health, the education problem, the education of the young in sex hygiene, and the question of eugenics. I would venture now to point out, having analysed the subject, the way in which the influence of the male and female parents affects the various stages of the reproductive cycle. When we examine the cycle from this point of view, we find that the male parent is only concerned with Stages A and B in life production, and often indirectly only with the final stages F and G in life preservation, whereas, on the other hand, if we take the maternal influence, we find that it operates throughout Stages A, B, C, D and E in race production, and, of course, very intimately indeed in life preservation in Stages F and G, by rearing the child from birth to twelve months, and by directly influencing the welfare of the child up to adolescence and the reproductive stage. Then if we consider for a moment the question of environmental factors which affect race production and race preservation, we see at once that venereal

disease is present throughout, that the question of syphilis and gonorrhœa, either together or separately, affect every stage. The fertilisation of the ovum, the early and late miscarriages, the infant at birth with its syphilitic taint, the infant from birth up to twelve months, and the child through adolescence up to the reproductive age. Environmental factors are seen to affect certain stages much more than others. It is quite certain that ante-natal problems are largely concerned with the fœtus up to and beyond parturition. I think a consideration of the whole problem points to the urgent need for fuller co-ordination of the health agencies of the country, and the establishment of a Ministry of Health. We also want reform in regard to the law affecting death certification and divorce. We want a fuller co-ordination of the vital statistics of the nation, and the establishment of some sort of continuous National Health Register and of an Anthropometric Census. We also want to seriously consider the question of health certificates before marriage; the unequal distribution of the sexes in this country and the Colonies; the effect of war and other conditions on the birth-rate, especially in its differential sex aspect; the whole problem of eugenics and education in racial, civic and domestic responsibility. An important question arises in regard to the way in which the presence or absence of hereditary characters affect infant welfare, especially those hereditary characters which have to do with the development of the central nervous system, and which lead to the appearance in offspring of feeble-mindedness or mental deficiency. In the absence of more definite knowledge about these hereditary characteristics, any attempt to control marriage by legislative means should be undertaken tentatively and with as much circumspection as possible. With regard to the effect of environmental factors, the chief facts which will emerge as of especial importance when we have finished our inquiry will probably be four: first, the voluntary restriction of the birth-rate; second, the economic burden of parenthood—and may I say, in regard to the voluntary restriction of the birth-rate, this factor has to be judged from the point of view of its possible influence on the quality, as well as the quantity, of human life? The voluntary control of the birth-rate, which is now being carried on on such an enormous scale in all civilised countries, will have to be considered very carefully from a scientific point of view. The second point, the economic burden of parenthood, is assuming more and more importance. The third point is equally important, the effect of

venereal disease and of other racial poisons on racial welfare; the total effect of these last is wholly bad. Then, fourthly, we have the many pre-natal and post-natal influences which affect infantile health and mortality and the health of the mother as well.

1. THE CHAIRMAN. You mentioned the influence of mumps; may I take it that all glandular trouble more or less affects the development of the sex organs?—It is a somewhat unknown field, and there is little evidence, except that there is a close association between the sex organs and the organs of internal secretion like the thyroid.

2. As far as you can judge from your experience and knowledge, is there a natural converging of similar people towards matrimony?—There is certainly evidence that in the case of certain nervous affections, especially blindness, muteness, etc., a natural process of attraction exists between people similarly afflicted.

3. Supposing Nature had fuller play—because nowadays Nature has precious little play owing to refinement, civilisation and all sorts of things—would it lead to the coming together of more suitable people?—I cannot say.

4. You speak about the age of marriage; have you any theory with regard to that?—I think the gradual postponement of the age of marriage through social conditions, false notions as to the standard of life, and especially through economic causes, has been prejudicial, and has led to increased immorality, and has decreased what should have been the production of healthy lives.

5. So long as people have arrived at a physically suitable age for marriage you would hold that the earlier they marry the better for morality?—Yes, if economically possible. The postponement of the age of marriage is one of the disharmonies of our civilisation—I mean the postponement after a reasonably mature age.

6. Twenty-six or twenty-seven?—That would be a fair age if economic conditions allowed.

7. Have you any theory with regard to the solution of the economic burden of parenthood?—There we are up against the whole problem of the taxation of unmarried adults, and relieving the weight on the fathers and mothers of families, especially in the younger stages.

8. You speak of the taxation of bachelors; there are two sexes, and we are hearing more and more about wage-earning womanhood, and women holding more and more independent positions. Are you only going to tax bachelors?—I think that question is also bound up with the very

serious problem of the unequal distribution of the sexes in this country and abroad.

9. Do you want to relieve parenthood on account of parenthood of any of the ordinary taxation?—I would relieve parenthood for its services to the country, up to the extent to which those services are realised as being vital to the present and future welfare of the country.

10. There is some relief—educational relief. Would you like to see the child in its early stages assured by the State of a full and proper amount of nourishment?—Yes.

11. Would you go so far as to say that directly any married woman is beginning her child-bearing stage she should, in regard to all that is necessary, have everything that is required?—That would be an ideal position.

12. But the proper position would be to pay the husband such wages that he could provide it himself?—Yes, together with the education of the male parent in the right use of the money and in the provision of essential requirements.

13. How many authorities, instead of the one we desire, the Ministry of Health, are dealing with the question?—About thirteen, I think.

14. If we had educated public opinion to begin with, and educated statesmanship as well, we would centre all these things under one authority and get them better and more economically carried out?—Yes.

15. How do you consider reforming the laws affecting divorce would help the matter?—Having in mind our object, which is the production of healthy life in sufficient volume, one is inclined to think—indeed the evidence suggests—that our present Divorce Laws, by keeping together people who are not concerned during their married life in the production of this healthy young life, somewhat handicap the future of the race. I think it is a matter for real judicial examination.

16. Can it handicap the future in this way: when two people have lost the close touching sympathy which there should be between married couples, if they then produce children, are they not unlikely to produce the best type of children?—I should imagine they would produce the same type as before, but they would be very unlikely to produce the same quantity, or to exercise that careful supervision essential to proper upbringing.

17. I am thinking of pre-natal influences. With two unsympathetic natures, would there be danger as to the quality of the child?—I am afraid there is no scientific evidence on the point.

18. With regard to eugenics, have you any personal feeling?—The control of the lives of feeble-minded persons and the prevention of procreation by the segregation of such individuals in industrial colonies has been wholly to the good, but if we are content to go on with the old plan of letting the feeble-minded mother have a series of children in the workhouse, you cannot hope for any real improvement.

19. On the whole, illegitimate children do come very greatly from feeble-minded persons?—The average rate among the feeble-minded is seven as against four point something in normal families.

20. Dr. Routh. I do not quite understand why zymotic diseases are included in "A" of your schedule. Mumps, I suppose, is one of them?—Yes. Zymotic disease is a very small problem, and I think it might be left out. The outstanding factor in "A" is the racial poisons. As regards "F," infants up to twelve months, death in the first month is almost entirely due to pre-natal causes, and a subdivision would be useful in the schedule.

21. Lady Selborne. Have you any figures as to the healthiness of infants born of parents of different ages? Are infants born from parents between twenty and thirty stronger than infants born from parents between thirty and forty?—That is one of the things we have still to acquire definite scientific knowledge about.

22. Lady Marlborough. As a practical means would health certificates before marriage do away in many cases with racial poison?—I should imagine the educational effect of such a development would be very great indeed. The prime factor would be the question of venereal disease.

23. Mrs. Clay. Have you any statistics about what eugenics has done?—The great advance in knowledge in regard to eugenics has been in regard to the breeding of animals and plants. The trouble is that you cannot apply all that to the human family, where the conditions do not lend themselves to experiment.

24. Dr. Marie Stopes. If you have a sense of racial responsibility taught to the nation practically in the schools, and at the same time you had widespread knowledge of perfectly hygienic methods of birth control, is there the slightest necessity for such a thing as health certificates before marriage?—I would speak with great caution about this question. Until we can get education in regard to eugenics, which is going to take some generations yet, we may, as a community, be driven to some form of self-protection in regard to health certificates before marriage.

25. Would it not mean increasing prostitution and the spread of disease?—We are assuming that the people who would be prevented from marrying would be those persons who, from hereditary causes or from acquired disease, were not thought fit to be parents.

26. Why are you mixing parentage and marriage?—Because in regard to racial welfare they are intimately associated. In regard to two persons beyond child-bearing age certificates would not matter. I regard this as one of the subjects which should come forward for our consideration.

27. Miss Broome. If you propose fresh taxation to endow motherhood, will you do that to the people who produce children and who are thoroughly unhealthy? Will you let them go on doing it, or will you have some local control?—The schemes that have been put before us for the endowment of motherhood by Miss Royden and other witnesses do not appear to me to be wholly and completely successful, either in their present application or future outlook.

Statement of Dr. Amand Routh

The birth-rate in England and Wales has steadily declined from 36·3 per 1000 persons living in 1876, to 23·8 in 1914, the last normal year. The birth-rate was 21·6 in 1916, and 17·7 in 1917. Sir A. Newsholme has stated that "if the birth-rate in England and Wales had been the same in 1914 as in 1876, 467,837 more children would have been born," and that the reduction of the size of families was "largely and probably chiefly in consequence of international restriction of child-bearing." These figures should be carefully considered now that reconstruction is in progress. Another important cause of the low birth-rate is the sterility of one or both of the parents in marriage. Untreated and even unrecognized gonorrhœa is the main cause, owing to the secondary occlusion of the generative ducts, which must be patent in both partners to secure fertilisation. Apart from the effect of sterility and the artificial restriction of child-bearing, ante-natal death and disease is the most serious cause of a low birth-rate, for if the unborn child does not perish during gestation, it is born so debilitated that it fails to survive its birth, or only lives a few hours or days. The first obstetrician to call attention to ante-natal death was Sir William Priestley in his Lumleian Lectures in 1887 at the Royal College of Physicians on "The Pathology of Intra-uterine Death," and he was followed by Dr. H. W. Ballantyne of Edinburgh in his classical works on *Diseases*

of the Fœtus in 1892, and on *Ante-natal Pathology* in 1904, unfortunately before the discoveries of the causation, diagnostic tests and salvarsan treatment of syphilis were promulgated. He has never ceased to protest against the waste of ante-natal life, and has been encouraged in his protests by Dr. Edward Malins of Birmingham (1903), Mr. Alderman Broadbent of Huddersfield (1904), Dr. Mary Scharlieb and Sir Crichton Browne in 1907. Dr. Ballantyne was the first to provide pre-maternity beds in his obstetric wards. Early in 1914 Dr. Routh collected available statistics, and showed that the ante-natal death-rate was probably greater than the death-rate of the survivors of the first year of life. This had not been realised, and its significance was emphasised by the losses of the war which began in a few months. Still-births, *i. e.* deaths of children during the last twelve weeks of gestation, are now compulsorily notifiable, and are known to be about thirty per thousand of the total births. It is estimated that four times as many die during the twenty-eight earlier weeks, and Sir Arthur Newsholme has provisionally adopted this estimate. This means that in 1914, the last normal year, there were 138,249 fœtal deaths during pregnancy; and as in the same year the deaths of their survivors was 92,166 up to the end of their first year of life, the total deaths between conception and the end of the first year was 230,415. This works out at 250 per 1000 births (1 in 4). A quarter of the infants who die during their first year of life, die during the first month, so that 175 deaths per 1000 births (1 in 6) occur between conception and the end of the first month from causes mainly due to pregnancy and labour. When it is happily remembered that only four women per thousand (1 in 250) lose their lives from causes connected with child-bearing, it is surely time to tackle this loss to the nation, for there is no obvious reason why this disparity should be allowed to persist.

The death-rate of illegitimate children is at least twice that of the legitimate rate. In 1914, 37,329 illegitimate children were born, with a death-rate of 207 per 1000 births during their first year of life and seventy-two during their first month. The ante-natal death-rate could be enormously reduced if all expectant mothers came under efficient medical supervision, for a careful study of their own and their children's history and of their own health would enable preventive and curative measures to be successfully adopted.

Hospital statistics show that more than half the ante-natal deaths are due either to *syphilis* (twenty per cent.),

maternal toxæmia (ten per cent.), or to accidents and complications of difficult labour (twenty-five to forty per cent.), whilst alcoholism, prematurity, malnutrition, fœtal deformities and criminal abortion are other causes. As regards congenital syphilis, it is now known that unborn children can be safely treated by salvarsan both through their mothers during gestation and after their birth, and that fifty per cent. become apparently healthy, but the after history of these cases needs careful study. *It is remarkable that any children of syphilitic parents survive*, but it is probable that the placental tissues and their ferments exercise a controlling action upon the infecting organism, and so afford time for treatment to be adopted when pregnancy is diagnosable.

The *toxæmias of pregnancy* cause frequent death of mother and child. They are due to unknown chemical poisons, produced by unknown processes at or near the points of union of mother and child, and they attack varying maternal organs with unexplained discrimination. Many cases of gradual toxæmia can be detected early enough to enable treatment to be successful. To combat the virulent and sudden types no specific treatment is yet known, and they are practically incurable. Research alone can discover the nature of these poisons and can point to the antidote or other means of treatment.

Accidents and complications of labour constitute the greatest single group of causes of ante-natal and natal death (probably over twenty-five per cent.). Most of these complications, such as pelvic contractions, tumours and severe fœtal displacements, are discoverable before full term, and the necessary surgical or manipulative treatment can be adopted then or at a pre-arranged date. Pelvic contractions are very common in cities like London, Glasgow and Manchester, and are often not discovered till parturition. Taking the combined figures for 1914 given by Queen Charlotte's Hospital, London, and the Maternity Department of St. Mary's Hospital, Manchester, 218 cases of contracted pelvis requiring operations were admitted. Of these, seven mothers who were already septic after repeated previous attempts at delivery died, and fifty-six of the children were already dead or had to be destroyed to save their mothers. Seventy of the 218 cases had Cæsarean Section performed, several as emergency operations, and yet only three mothers and three children died. It is almost certain that all these women and children would have been saved if the pelvic conditions had been discovered before labour. All the

mothers and children would have died if left undelivered. It may be mentioned that Cæsarean operations can be repeated in subsequent pregnancies with even less risk.

Recent Presidents of the Local Government Board, under the able medical advice of Sir Arthur Newsholme, have done much to secure medical supervision of expectant mothers by encouraging maternity centres and ante-natal clinics and affording them grants in aid, and by arranging that complicated cases, both legitimate and illegitimate, should be admitted to hospitals. Both midwives and doctors need a more practical education in obstetrics, and greater skill in recognising the conditions during pregnancy which are likely to make labour complicated. There should be a closer linking-up of midwives and the local health authorities, and there should be also greater facilities for getting expert obstetrical advice and admission to lying-in beds. As compulsory notification of pregnancy is out of the question, women must be educated to appreciate the personal advantage of medical supervision, which might only consist of one visit. If this became a universal custom it would, as Dr. Mary Scharlieb has shown, constitute automatically a voluntary registration of pregnancy.

Meanwhile *research* is urgently needed. Little is known of the physiology of the placenta, and still less of the etiology and pathology of ante-natal diseases. At least twenty-five per cent. of the still-births are due to "unknown causes," and probably not ten per cent. of the earlier fœtal deaths can be explained. It should be made possible to have every expelled product of conception examined and reported upon by expert pathologists. Now is the time, when the Ministry of Health is to handle reconstruction from the health point of view, for research centres to be organised throughout the country and rendered available to all in charge of maternity. Doctors are being demobilised, and with the help of skilled bacteriologists and chemical pathologists, could take up the work, and ante-natal hygiene would soon be placed on a scientific basis. This would cost the State very large sums, for Research Institutes, endowed by private munificence, such as the Rockefeller in the U.S.A., are not yet considered by our millionaires to be desirable objects for patriotic benevolence. Donors do not realise that the national results obtained by research will be commensurate with their generosity. Meanwhile pathologists, on entirely inadequate salaries, and working in badly equipped laboratories, are bravely devoting their time to research in this and other directions, unable however to pursue their researches to any

real depth or conclusion. Most of these ante-natal deaths are preventable, and those who know this best hope that the time may soon come when State endowment of research in this field will enable King Edward's question, "If preventable, why not prevented?" to receive its answer. No doubt Dr. Addison, in his continued efforts for reconstruction at the Local Government Board, will take this subject into consideration, and facilitate effective research and provide means of appropriate prophylactic ante-natal hygiene.

Dr. Routh also presented the following list of possible causes of ante-natal disease and death, when complicating pregnancy—

I. Paternal Causes.

Syphilis by direct infection of ovum. Diabetes, Bright's Disease, Plumbism, etc., including Debility of Embryo.

II. Maternal Causes.

A. *Pathological.*

1. Malnutrition.
   Anæmia, etc.
2. Acute Specific and Infectious Diseases, etc.
   Small-pox, Scarlatina, Measles, Enteric, Influenza, Erysipelas, Pyelitis, Acute Pneumonia, Bronchitis, etc., Gonorrhœa.
3. Chronic Diseases.
   Tuberculosis, Syphilis, Diabetes, Bright's Disease, Heart Disease, Asthma, Plumbism, Chorea.
4. Tropical Diseases.
   Malaria, Cholera, Dysentery, etc.
5. Toxæmia.
   Pernicious Vomiting, Albuminuria, Eclampsia, Acute Yellow Atrophy of Liver (? Chorea, ? Diabetes).

B. *Mechanical.*

Retroversion of Gravid Uterus, Pelvic Contractions, Obstructing Tumours (Fibromyomata, Ovarian, Osteomata), Carcinoma Cervicis, Cicatricial Stenosis of Cervix, Vagina, etc., Undue Ventrifixation of the Uterus, Vulvar Abnormalities.

C. *Miscellaneous.*

Pelvic Inflammations, Antepartum Hæmorrhages (Accidental, Placenta Prævia), Ectopic Gestation, Criminal Abortions, Operations during Pregnancy.

III. Fœtal Causes.

A. *Developmental.*

B. *Pathological.*

Hydramnios.
Hydatidiform Degeneration of Chorion, Blood Moles.
Fœtal Toxæmias.

C. *Mechanical.*

Malpositions and Malpresentations, Malformations, Relatively Large Children.

Note.—Many of the above conditions could be diagnosed early, and appropriate treatment adopted, if women were under medical supervision during pregnancy.

This list (said Dr. Routh) contains most of the conditions and complications that may arise during pregnancy, and may militate against healthy children, and possibly involve the life of both the mother and child. I begin my précis with a statement of the difference between the birth-rate of 1876 and 1914, but I am not going into the question of the restriction of maternity now, because I want to confine myself largely to ante-natal causes. I say very little about sterility except sterility due to gonorrhœa, which is one of the commonest, if not the commonest, cause. There are other forms of sterility which are quite as important though not so numerous, such as malformations, absence or immaturity of organs that are essential. As regards *tuberculosis*, when one took up the subject one expected to find that paternal tuberculosis was able to infect the fertilised ovum and that the mother could also infect the ovum after fertilisation, but there is no evidence obtainable of tubercle being found in the fœtus, dead or alive, except in those cases where the generative organs of the parents are involved; I therefore omit tuberculosis as a cause of ante-natal disease. If a tuberculous woman becomes pregnant, she gains both health and weight. I believe the chorionic

ferments prevent the tubercle bacilli from infecting the fœtus.

Alcoholism in either parent ought to be put amongst the causes, because it is proved that it may affect the germs of the second generation, as well as the child *in utero*.

Prematurity is largely the result of other conditions which cause ill-health of the child and early delivery. About sixty per cent. of the premature children born die in the first twenty-four hours, and they represent about ten per cent. of ante-natal deaths. It is doubtful how far *malnutrition* produces still-birth and abortion. There is a difference of opinion, because if a woman is mal-nourished, the child seems to be born fairly well-nourished, and it is the mother who suffers : her tissues seem to be drawn upon, but the child is unquestionably unable to withstand the shocks as well as a really healthy child. As regards Group No. 2, small-pox, scarlatina, etc., as a rule the chemical ferments seem able to prevent the germs of these diseases getting through the barrier between the mother and the child, so that the child is rarely affected. *Pregnancy pyelitis* is a dangerous disease in some respects, and its ineffective origin is difficult to explain. *Pneumonia* and *bronchitis*, both germ diseases, do not as such infect the child, but owing to the mother lacking oxygen, the child may die from dyspnœa, from partaking of toxic products in the mother's blood. *Gonorrhœa* has apparently mainly local effect, such as ophthalmia neonatorum, which causes fifty per cent. of cases of blindness. If contracted during pregnancy it will not, as a rule, bring on abortion, except in very early weeks. If diabetes is present, or Graves's Disease, women do not often become pregnant; and the same applies to Bright's Disease. Heart disease with inadequacy can be recognised during pregnancy, and it has to be watched very carefully, for if heart failure ensues, both mother and child may die. *Plumbism*, or lead poisoning, used to be a frequent cause of abortion, but most of those engaged in lead and glass factories have now been put under proper inspection, and diachylon is now scheduled as a poison. A pregnant woman hardly ever shows signs of *syphilis* unless recently contracted, that is, in cases of primary or secondary syphilis, although she may have syphilitic children. The child may be treated with safety through the mother during the pregnancy with salvarsan, and the treatment can be continued after birth. The child is then often born negative; but this treatment is new, and the after history of these cases needs careful watching. Here, again, medical supervision during preg-

nancy is essential. Among the mechanical causes of ante natal disease there is no cause more important as a cause of still-births than pelvic contractions.

Amongst other causes of death *in utero* the most terrible is *uterine hæmorrhage*, and that is the only condition one cannot control. For instance, out of 119 cases of placenta prævia, seventy-five per cent. of the children died, and the woman may even die before those about her realise that she is in danger. The great thing is to get midwives and doctors more definitely educated on this point, so that they can recognise not only the conditions that lead up to it, but realise that the woman is seriously ill from what we call concealed accidental hæmorrhage. As regards fœtal causes, hydramnios is often associated with deformities in children. My final point is simply how research would help us, and I am perfectly convinced that we should get our mortality, both natal and ante-natal, lessened by fifty per cent. or more if these women were seen during pregnancy. There is only the ante-natal hæmorrhages that we cannot foresee.

1. THE CHAIRMAN. Do you mean that you recommend examination of all prospective mothers?—Yes, every mother should be examined unless she has had a child before, in which case her doctor would know all about her and there would, as a rule, be no necessity for internal examination.

2 I suppose that in some of these cases the patient herself might not know anything about the trouble?—That is so.

3. Would the examination, generally speaking, be so difficult or scientific that only a medical man and not a midwife could do it?—A midwife would recognise the difficulty in extreme degrees of contraction, but it might be her first case, the first she had noticed, and she might not recognise a minor degree of contraction.

4. That would mean that you would be almost compelled to make a person notify?—If the midwife suspects pelvic contraction she must fill in a form which requests that a medical practitioner should see the patient.

5. How are you going to get examination when you cannot enforce it?—Through educating the women through maternity centres and schools for mothers, and the experience of other women.

6. Health visitors would be very useful in this?—Certainly.

7. I am inclined to look to the health visitors as possibly the greatest agents towards bringing all these matters into something like proper shape?—Yes, and the mother's own experience. There are over 1500 mothers' schools and

maternity centres at the moment, but only about one hundred and fifty ante-natal clinics.

8. DR. MARIE STOPES. Would you not agree that the wearing of corsets, particularly tight corsets, is a very serious contributory cause?—If a woman wears tight corsets beyond the fourth month, and tries to keep her figure down to what it was before that time, it is bound to do harm, especially if vomiting is present.

9. You speak as if vomiting is quite natural in pregnancy. Is it due to her wearing corsets, probably years before the child was conceived?—I am speaking of normal vomiting. I do not think it is due to the corsets.

10. Is an ordinary practitioner competent to deal with this?—Yes, with normal pregnancy sickness, but not with the pernicious form. At the present time maternity teaching is not what it ought to be. Every midwife should be in touch with a doctor and every doctor in touch with an ante-natal clinic or expert obstetrician.

11. MISS MICHELMORE. Would complications be avoided if health visitors were competent midwives?—At present a health visitor does not go to the patient until ten days after the birth of the child; she does not interfere with the midwife. A great many complications would be avoided if the health visitor were a competent midwife, but during the pregnancy the midwife would visit the patient.

12. LADY SELBORNE. Don't you think it would be the means of saving a good many lives if there were adequate maternity hospitals at the various centres, especially in country districts, where they could send women who were about to have their first children if they were doubtful about them?—Yes, if a woman has been to an ante-natal clinic and has had her date fixed for induction of labour and Cæsarean section, she would go to the nearest lying-in hospital as arranged. There ought to be facilities for getting her there.

13. There is the foundation of machinery for that in the Poor Law Infirmaries if they were made Public Health Institutions instead of Poor Law Institutions. It would be quite easy to have an efficient medical staff in the centre or county town, which could furnish efficient medical experts? —There are not sufficient expert medical practitioners to staff all the Poor Law Infirmaries.

14. COLONEL BOND. In regard to the pre-natal clinics, which must be and will be established in such large numbers, would you wish to see them wholly or largely staffed by women doctors?—Yes. If suitable women doctors can be

got, they would be preferable, but in a great many country districts it would have to be the local practitioner.

Fourteenth Day

Thursday, January 30, 1919

The Bishop of Birmingham in the Chair

Statement of Sir William Osler (Regius Professor of Medicine, Oxford)

Gonorrhœa represents perhaps Saul to the syphilitic David. They are both great killers. Of the two, gonorrhœa is the more prevalent, but is not so fatal, nor is it transmitted to descendants; but it is the cause of greater ill-health unquestionably. It is difficult to cure permanently. Latent gonorrhœa is widely spread in the community—by this one means cases which are apparently cured, but in which the germs remain hidden in some portion of the generative tract, and they may break out and produce serious diseases years after the primary infection. Of course from your standpoint of birth-rate it is a more important disease than syphilis. The birth-rate of syphilitics may be larger than the average. At least there are instances in which the birth-rate of the syphilitic is high; but, on the other hand, gonorrhœa is a very common cause of sterility in the male, the percentages ranging from two or three up to seventeen or eighteen. This results from secondary inflammation in the epididymis, which may be followed by sterility, but not impotence. It is a much more serious disease in the female, because from fifty to ninety per cent. of all cases of chronic inflammation of the pelvic organs—the uterus, the tubes and the ovaries—is caused by gonorrhœa, and the majority of these cases are associated with sterility. Apart from that, it is a very great cause of chronic ill-health, and gynecologists have come to recognise the gonococcus as a more important germ even than the spirochæte of syphilis in causing ill-health in women. These are the main points in reference to it as an infection in contrast to syphilis.

Statement of Sir Bryan Donkin, M.D., M.A.

My point in this particular campaign has been to concentrate for the last two years more on impressing on the

public the necessity for medical prophylaxis, and I should have thought a body like this Commission would have been sufficiently informed on the tremendous dangers of syphilis, if not of gonorrhœa. It has been so persistently brought forward by the Press through the means of the Royal Commission on Venereal Diseases, and also by the existing Society for prevention, that it is well known.

Sir William Osler. I think perhaps the majority of you who are laymen, just as well as medical men, know the prevalence of syphilis and its extreme danger. The unfortunate thing is, that the offender in syphilis is not the one who bears the whole results—the innocent suffer. They suffer with gonorrhœa in a great many cases, but the innocent in syphilis probably outnumber the guilty, and that makes it a terrible disease in the community when you think of the extraordinary number of women and children who are infected.

1. The Chairman. Are you prepared to state that syphilis is never hereditary?—It depends on just what you mean. A man with syphilis infects his wife, and if she is not treated during her pregnancy, the chances are strongly in favour of her bearing an infectious child, and it may go on to the third generation, but very rarely.

2. You say gonorrhœa is the greater cause of ill-health; does it not kill so frequently?—The majority of women infected with syphilis, after a preliminary period of ordinary treatment may, even when they remain infected, have fairly good health, whereas a very large number of women infected with gonorrhœa have ill-health associated with infection in the pelvic organs.

3. Does gonorrhœa lie latent for years?—Often for many years.

4. Are you prepared to say it would re-awaken general ill-health?—Sometimes by pregnancy itself, and by any acute inflammation of the pelvic organs.

5. Chronic ill-health in women is very often due to gonorrhœa, you say. Is that any particular form of chronic ill-health?—Only general debility. It may be associated with chronic inflammation of the pelvic organs, and it is recognised that a very considerable proportion of the conditions in the pelvis calling for operations are associated with gonorrhœa.

6. In regard to that, would it be possible for people to marry, so to speak, quite innocently, not knowing that they had had it?—Yes. Many men marry innocently, thinking that they are cured of gonorrhœa.

7. You can always test in regard to syphilis?—Yes.

8. But not gonorrhœa?—No, because unless a special examination was made it might be difficult to say whether a man had latent gonorrhœa.

9. In that sense gonorrhœa really is more dangerous than syphilis, because you cannot make sure whether a man still has it?—Yes.

10. Does your experience lead you to believe that there is absolute ignorance on the part of the majority of people as to gonorrhœa being anything like as dangerous as syphilis?—I think there was, but it is not so now. I think the publicity that has been given has aroused people to the sense of the danger and importance of gonorrhœa.

11. Lord Willoughby de Broke. With regard to discovering syphilis, is it too much to say that the test is absolute?—Yes, if you know who is making it.

12. The Chairman. You mean it must be an expert?—Yes.

13. A general practitioner would not be able to make the test?—No.

14. Dr. Saleeby. I take it there is no genitic infection, and what is very often called hereditary is ante-natal infection?—Yes.

15. There may be nothing unhealthy in the germ-cells?—No, I do not think the spirochætes can act in any way like that.

16. Dr. Porter. Syphilis automatically ceases to be infectious, gonorrhœa does not?—When a man ceases to be infected with syphilis, twenty years after the primary lesion he may even have secondary sores in his mouth. The spirochætes have been found after a much longer period than that: there is no limit to the time which spirochætes may remain in the body—twenty or thirty years. They have been found in any number of cases of general paralysis of the insane.

17. Don't you think that the statement, which is so commonly made, that a man ought not to marry until at least two years after he has been cured ought to be contradicted without delay?—If a man has been properly treated in a modern fashion, and has repeated Wassermann tests, I don't see why you should not consider him as well cured as he is ever likely to be.

18. I think you misunderstand me. The statement is made that they should not marry in less than two years after being cured?—It ought to be qualified. Unless by the kind of treatment I have named, that statement would be entirely erroneous.

SIR BRYAN DONKIN. No modern informed book about venereal diseases ever preaches that it is safe to marry in two years without such a qualification.

19. DR. SALEEBY. You say the birth-rate is higher amongst syphilitics; would you adhere to that?—There are individual instances. I think you will all agree that syphilitic women may be very prolific; they may have many miscarriages, but there are often very large families.

20. DR. AMAND ROUTH. It is hoped that the salvarsan treatment will so far destroy the spirochæte that after two or three years it will be less likely to be carried than it used to be?—Yes.

21. Many of these cases used to be either not treated at all or treated by mercury alone?—Success of the salvarsan treatment depends upon how far it is carried out.

22. There may be several occasions of Wassermann reaction, and yet a man may be able to infect his wife through the seminal fluid. There are cases recorded, and personally I have known several cases, of women being infected when the man was absolutely negative?—I should like to know the laboratory tests and to know the men who made them.

23. As regards latent gonorrhœa, one sees a good many cases of marriage alone lighting up an old trouble, and also that alcohol will light up apparently absolutely quiescent cases?—Yes.

24. In 4*b*. in your précis you say that in the female from fifty to ninety per cent. of sterility is due to inflammation. I do not quite understand what those figures mean?—You will remember that Noeggerath was really the man to whom we owe our modern knowledge of the serious nature of gonorrhœa as an infection causing illness. He put his figure at ninety per cent. of sterility among women being caused by gonorrhœa. That is the highest percentage. I place great reliance upon his statement. Gonorrhœa may be accidentally acquired. I think recent figures are very nearly as high as those I have given.

25. THE CHAIRMAN. You use the words "gonorrhœa accidentally acquired": what do you mean?—There are a great many cases in children, for instance, acquired in house infection and hospital infection, particularly babies' hospitals. There are a great many cases of gonorrhœa accidentally acquired. In a recent case a soldier returned home and infected his wife and three children and two other occupants in the same house—five people in that house accidentally infected.

26. Dr. Porter. What parts were infected?—The vagina.

27. Dr. Amand Routh. Infection from using the same napkins?—Yes, in children's hospitals it is notorious how gonorrhœal infection may spread. Think of the trouble they had in Great Ormond Street, where subscriptions were reduced owing to a Press campaign against them on account of an outbreak. It is an exceedingly difficult germ to get rid of in hospitals, and in the same way there is difficulty in these small family outbreaks. In some cases acute peritonitis in children is due to gonorrhœa.

28. Dr. Porter. Accidental infection would be much more common in the eye, for instance?—Yes.

29. Dr. Chalmers. Would it not be useful to the general public to have some explanation of the difference between heredity and infection? I rather think that if the public got it into their heads that syphilis was not hereditary it might alter their views?—Sir Bryan Donkin. A great many people use the word "hereditary" in an exceedingly vague way, but I agree quite with the way in which it has been used by Sir William Osler.

30. The Chairman. These three essential measures in the campaign have been put down by you, Sir William?

Sir William Osler. Yes, I put them down.

Sir Bryan Donkin. I quite agree.

31. It would be quite unfair to you to say that you and your school left the moral side out of consideration?—Sir Bryan. Quite, and I feel quite sure I can answer for those who have had any experience in the practical application of prophylaxis.

32. Is the proposal to allow any one to go to any chemist and get the ointment, or whatever else may be required, before they commit the act?—Sir Bryan. Yes.

33. You would have the information given as freely as any other information in regard to disease?—Sir Bryan. Yes.

34. Is there any age at which you would say that information should be given?—Sir Bryan. I think that is a matter for the educational side, but I think that early in life some information should be given to both sexes with regard to how disease may be contracted and how it may be prevented.

35. Would you allow quite young people to go to the chemists and get these preventive things?—Sir Bryan. I think it would be entirely a matter for the parents and the teachers of the children.

Sir William Osler. I would place the whole responsibility on the Public Health authorities. Let them have the

responsibility of dealing with the disease as they deal with small-pox and scarlet fever. It is for them to decide at what age and how these measures should be applied.

36. If these things are done, there is safety for the person concerned?—SIR WILLIAM. Not always; not necessarily. The evidence before us is that these measures, carried out in a proper way, are effective. It has been shown in the Army—in the American Army—that prophylaxis immediately after the act is a measure that can be efficiently carried out. Whether that can be done by the public at large, experience only can tell us. But for the first time in the story of civilisation we have measures which, properly tried, have proved effective, and of that I do not think there can be any question in view of the experience of such an expert as Colonel Walker of the American Army, and others.

37. LORD WILLOUGHBY DE BROKE. He said "after" the act?—SIR WILLIAM. I do not care whether it is after or before. What I am after is to put before the public measures which for the first time have been shown to be effective in controlling two of the great scourges of humanity.

38. THE CHAIRMAN. Do you contend it is equally effective after the act?—SIR WILLIAM. Much more so, I should say. It is childish to discuss whether before or after.

SIR BRYAN DONKIN. This involves a question which has been constantly stated, constantly cleared up, and as constantly obscured in controversy and in the papers. The question of prophylaxis has been clearly stated by myself. I never left it open to doubt; but it was at once stated that it was wrong to use a remedy proved to be preventive before the act, and right to use it afterwards. That was the bone of contention between the National Council for Combating Venereal Disease and those with whom they differed, but after a time they altered their phraseology and went in for "early treatment," to be applied soon after the act, but not before. In some cases before, but in most cases after the act is better, but the person must have the prophylactics—the preventive means—with him before. Experiments such as were made by Metchnikoff more than twelve years ago show that to prevent the infection becoming a disease it must be used within a very short time after the risk of infection. From one hour up to twelve hours has been stated.

SIR WILLIAM OSLER. There is no reason why, with venereal clinics, treatment within twelve hours should not be given to any person who has run the risk of infection, men or women. In many instances treatment would thus

be given in a much more satisfactory way than it could be by the person himself. The whole moral crusade has failed absolutely. I should like to read from an interesting letter received from Colonel Bullock, who speaks with reference to the systematic attempt to apply prophylaxis. He says: "There has been no systematic attempt to apply prophylactic methods in combating venereal diseases either in Canada or in England. The only approach to it has been in connection with the department of which I am in charge. Speaking as a clergyman, not a medical man, I have no hesitancy in saying that, like Christianity, the scheme has proved successful just so far as it has been faithfully tried. Speaking of the one centre immediately under my supervision, it is of interest to note that during five months 25,518 men have passed through the office. Every one of these men has been personally warned of the danger of venereal disease, has been told that the only absolute guarantee of immunity is in continence, and has been urged to 'play the game fair,' for the sake of the folk in Canada, and to keep himself 'fit' for the sake of the other fellows over in France who count on his 'fitness.' But, at the same time, he has been told of the advantages of prophylactic treatment. Up to the present there has been no authenticated case where either V.D.G. or V.D.S. has developed after the use of the prophylactic tube and the medicated irrigation within twenty-four hours after exposure to infection. I know the charge that such treatment removes the moral restraint, and makes it seem safe for a man to do wrong. In the name of the thousands of fellows who keep themselves clean I repudiate such an insinuation. They are not held back from indulgence by fear of any physical consequences; they are held by something far higher! Put into its simplest terms, prophylaxis, as related to venereal disease, is the answer to the question as to whether a man shall be treated for syphilis or gonorrhœa five minutes before, or five minutes after, exposure to infection. As related to the Army, it is a question as to how many fit fighting units can be placed in the firing-line."

39. Dr. Saleeby. Don't you think the term "disinfection" would be very much better than "prophylaxis"?—Sir William. Yes.

40. Do you consider that these materials come under the Venereal Diseases Act, either in intention or in letter—that is, the Act which forbids unqualified people from providing treatment for venereal disease? Do you think that what is known as a "disinfectant" comes under the letter of that

Act as a treatment?—SIR WILLIAM. That would have to be arranged.

41. You don't think it would be worth while having a test case?—SIR WILLIAM. I don't think you can under present conditions. I understand that chemists would not be allowed to dispense it.

42. My point is, that if these things, which are not early prophylactic treatment, but disinfectant, were called "disinfectant," confusion between them and quack treatment might disappear?—SIR WILLIAM. The word "disinfectant" has the advantage of being understood.

43. Have you any statistics of increased sexual intercourse following upon the provision of disinfection outfits?—SIR WILLIAM. I do not think they are available.

44. You accept the suggestion that some men are restrained by fear?—SIR WILLIAM. I think a considerable proportion.

45. And that therefore, other things being equal, the issue of means of prevention might increase sexual intercourse?—SIR WILLIAM. It is quite possible.

46. I put it to you that the issue of instructions such as these, which are provided for the New Zealand Army, are of such a character as to dissuade and disgust a great many men who might otherwise have indulged?—SIR WILLIAM. That is a detail.

47. It is an important detail. Evidence in the American Army showed that through teaching of this kind there was associated with the provision of outfits a diminution of sexual immorality?—SIR WILLIAM. I have not seen it.

48. It is not fair on the part of your opponents to say that it is a question of choosing either disinfectants or early treatment?—SIR WILLIAM. Certainly not.

49. You would agree with Sir Arthur Newsholme that a great majority of the cases where disinfection fails are due to intoxication?—SIR WILLIAM. I should be quite prepared to agree with that, but I do not know what statistics he has. The term "stamping out" I discourage. It is frequently said that the thing must fail because a great many people would be drunk. That, of course, is perfectly true, but the same might be said about every remedy. It is absurd to use the words "stamping out," and I say "immensely reduce."

50. You agree with Colonel Harrison that the opportunity now offered ought to be taken advantage of to teach every man before demobilisation the facts and principles of disinfection?—SIR WILLIAM. Yes.

51. You would go so far as to provide them with packets? —SIR WILLIAM. Yes. I should tell them what they required, and if they wished it I should provide them with it. The question is whether the Government is taking measures to see that no man in the Army is demobilised until he is domestically safe.

52. Have you any evidence as to the efficacy of disinfection amongst women?—SIR BRYAN. I have no evidence. You mean disinfection used immediately after the risk?

53. Yes.—SIR BRYAN. The only evidence I have is in regard to the Army.

54. You would agree with Colonel Harrison that means ought to be taken of instructing professional prostitutes as to means of personal disinfection?—SIR BRYAN. Certainly.

55. By a permanganate solution?—SIR BRYAN. I would not go so far as to say what should be used.

SIR WILLIAM OSLER. This should be made on the part of the nation a public health question, because the nation knows and feels, as we all feel, that the moral campaign has failed. The public health campaign may fail too, but it has never been tried. Give it a chance; the disease is still as rampant as ever it was. I saw five hundred men in one camp infected within two weeks from one port, and most of them came from three or four boats. Had Dr. Routh been in charge of those men as surgeon, would he have given them these outfits beforehand, before they left the ship on temporary leave, or not, knowing perfectly well that the port was an open whore-house? If he had given them the outfits he would have prevented the disease in ninety-five per cent. of the cases.

56. DR. ROUTH. I am perfectly convinced that unless I was ordered to do it I should not have done it, because I should have told them if they were not able to keep straight to come back as soon as they could in the morning and we would do what we could for them.

SIR WILLIAM OSLER. That is the reason why the public health authorities must act, when men take up that attitude.

57. COLONEL BOND. What is your view as to the relative efficacy before and after?—SIR WILLIAM. I should say "after" was much more likely to be effective.

58. DR. SALEEBY. You must name a time limit?—SIR WILLIAM. Immediately. It has been shown that the sterilisation of both the spirochæte and the gonococci has been effective within twenty-four hours. There are a

great many men who will not have the prophylactic disinfectant with them, but there will be in every centre a place to which men could go and get disinfection within twenty-four hours; and that is a very important matter.

SIR BRYAN DONKIN. The difference between one and two hours is great, and twenty-four hours is the absolute limit.

59. DR. SALEEBY. Colonel Harrison says: "Colonel Hugh Young relates that in one battalion in which all-night passes were freely issued the venereal rate was three times as high as in a neighbouring battalion where the men were required to be back by night. In the first case there was, of course, a delay of several hours before disinfection."

60. COLONEL BOND. Would you make any distinction between the problem as it affects the Army or Navy and as it affects the civilian population?—No; they are all citizens. The only advantage is that in the Army you have the men under control, and you can carry out with them measures which you could not carry out with civilians; but, after all, these measures, to be effective for infected persons, every infected person, male or female, should be under supervision, and should not be outside public health supervision until declared to be free.

61. You speak of the importance of keeping men under military control until free from domestic danger; you would agree that the difficulties of keeping them under control, and then of knowing whether they were free, are very considerable?—SIR WILLIAM. Yes, but the difficulties must be got over.

62. MISS MICHELMORE. If these cases cannot be treated by the ordinary practitioner, how long would it be before you could have specialists?—SIR WILLIAM. There will be centres in every county.

63. That is not sufficient?—SIR WILLIAM. I think the profession will be educated very much more in these things within the next few years. A great many doctors are going to venereal clinics and getting a good deal of education on the subject. Just as soon as public opinion is in favour, measures will go through, and politicians and public men will support them. It is a job for the public health authorities, just as much as small-pox or scarlet fever or tuberculosis, and as soon as they realise this, and get public opinion behind them, they will go ahead.

64. DR. PORTER. So that all you are telling us is that calomel is a disinfectant?—SIR WILLIAM. No, no. I am urging widespread facilities for disinfection.

65. Have you thought out any methods?—SIR WILLIAM. That is entirely what we would not do. You people are the experts; this is your job.

66. Do you agree that you ought to have penny-in-the-slot machines in the public conveniences?—SIR WILLIAM. That is a question for you.

67. In regard to education, what is the proper time to begin to teach the use of prophylactics?—SIR WILLIAM. I cannot tell you. You ought to arrange measures for the disinfection of this disease just as for small-pox or scarlet fever or tuberculosis. You just wake up to it and you can do it.

68. PROF. GOLLANCZ. Why should it not be put in charge of medical men properly qualified to deal with it?—SIR WILLIAM. If one in five persons in the community is infected you have to acknowledge that all our previous measures have failed.

69. DR. STEVENSON. Do you advocate compulsory notification?—SIR WILLIAM. Yes.

70. What is your view as to the possibility of that leading to the concealment of cases?—SIR WILLIAM. Just as in the case of tuberculosis, there will be a certain number of cases of concealment.

71. The average man would be very much more reluctant to admit he was suffering from venereal disease than from tuberculosis?—SIR WILLIAM. No; the average man is pretty careful of his hide. I see no reason to exclude syphilis and gonorrhœa from notification and to notify tuberculosis.

72. You don't think compulsory notification would do more harm than leading people to go to a doctor or clinic would?—SIR WILLIAM. No.

73. MISS BROOME. The innocent victims ought to be protected?—SIR WILLIAM. That is a good point: it is the women and the children who really ought to be protected.

74. DR. MARIE STOPES. There is a clear and definite statement that prophylactics, if used before, protect both against gonorrhœa and syphilis, but if used after only protect against syphilis?—SIR WILLIAM. I believe that is a matter of opinion. I do not know what evidence there is for the statement. That is a plain statement in the New Zealand paper, and they may have the evidence on which such a statement is made. I will look it up.

SIR BRYAN DONKIN. I think the general opinion is, and I have no doubt it is the opinion of the authorities, that permanganate of potash in solution used before would not

be sufficient to rely upon, but used afterwards would be completely reliable for both diseases.

75. DR. SALEEBY. You are talking about permanganate, and the reference here is to capsules.

SIR BRYAN DONKIN. My opinion is that permanganate of potash is sufficient to rely upon as a prophylactic for both diseases if used immediately after, but as to some time after, twelve or twenty-four hours, it would be worth while using calomel ointment, and the same before; either permanganate or calomel would be sufficient to rely upon if used as soon as possible afterwards. Almost any disinfectant would be perfectly efficacious if used as soon as possible afterwards, and such a protective as calomel ointment would be, no doubt, suitable if used before. Metchnikoff in 1905 made experiments, and showed that the infective agent was completely killed by using mercury in various forms. He used corrosive sublimate as well, I believe. He finally decided that thirty per cent. mercury was the most effective. At that time, I think, there was some doubt as to the efficacy of permanganate of potash. The solution of permanganate of potash now used by men experienced in the practice in the Army is about 1 : 1000. There is no hope, of course, if the germ gets into the blood.

76. DR. CHALMERS. Is it your idea, Sir Bryan, that any one who goes in to get a preventive should be able to get one on paying for it?—SIR BRYAN. It is a question to which I cannot answer "yes" or "no." What we want is that it should be made possible for any one who wishes to get a preventive to get it at a chemist's.

77. You advocate the sale of the thing freely because it has given certain results in the Army, and you hope for similar reduction of disease in the general public?—SIR BRYAN. Yes; they are the same people, you know.

78. The difference is as between a disciplined Army and an undisciplined public?—SIR BRYAN. I see none.

79. It is not the incidence of the disease we want to know, but what effect will education on this subject have on increasing or reducing the sexual act?—SIR BRYAN. There are no statistics, and it would be very difficult to get them. I suppose you might get statistics by the courtesy of the Army medical officers if they thought they would not get into trouble. You might get statistics as to the incidence of the disease in certain "parks" where prophylactics have been used.

80. DR. CHALMERS. Does this not seem to be rather a one-sided campaign? You are endeavouring to protect

men and doing nothing for women?—Sir William. It applies equally to both; I have never meant any distinction.

81. Would not the treatment of infected women raise the spirit of the Contagious Diseases Act? Would not that be the danger?—Sir William. Not if it was voluntary on the part of the women.

82. The Chairman. This New Zealand paper seems to exhibit a little want of confidence in itself, because there is an N.B.: "Always use a sheath as an additional precaution"?—Sir Bryan. I think that paper was the result of a kind of mixture of professional and non-professional advice. I doubt whether that N.B. was written by a medical man.

Fifteenth Day

Tuesday, February 11, 1919

The Bishop of Birmingham in the Chair

Statement of Dr. E. B. Turner, F.R.C.S., L.R.C.P.

All agree that these two diseases, syphilis and gonorrhœa, are most pernicious, not only to the birth-rate, but to the nation. The question is how we can reduce the number of persons affected and do our best towards getting those right who do happen to become affected. In regard to preventive measures, there is controversy and a split between certain schools. One school, particularly voiced by Sir Bryan Donkin and Sir William Osler and others, holds that the best thing is that the man should be taught how to use the various chemical methods which, if used before they run the risk of infection, may very materially do away with the risk of becoming infected. The other school holds that if a person has been overcome by temptation he should be treated as a potentially sick person, and steps should be taken to overcome infection if contracted. The number of men in the Army and Navy under discipline who have used these preventive chemical methods shows a very small proportion of cases of infection; and it has been pointed out, I rather think by Sir James Barrett the other day at Westminster, that out of two hundred men they did not have a single case where the men had used these preventive methods. A great number of figures were then given of Australian and New Zealand soldiers and men from the Navy. There was a very good letter in the *British Medical*

Journal last week from a temporary surgeon in the Royal Navy, pointing out how they had introduced these preventive measures, and the result was that the number of cases of infection was very small. No doubt there has been a very large amount of evidence brought forward to show that these measures in some cases are very considerably effective; but I want to point out the objections. It is only really useful when men are disciplined. I do not think there is a single instance of success in this matter when men have not been under discipline. It is a very easy matter in a battleship or in a battalion, if you have a capable medical officer, to take the men and control them. It is not a certain preventive under any circumstances whatever. Within the last few years I have had a certain number of cases come to me in the course of my practice, and in less than twelve months I have had five young fellows of the educated, officer class come to me, two suffering from gonorrhœa and three from syphilis, and they all told me that they had used pre-risk of infection preventives, while four of them said that under no circumstances whatever would they have gone astray unless they had considered themselves fortified against mischief by the use of these methods. In the *British Medical Journal* last week it was stated in a letter that out of the sailors who used "Jack's Dreadnought," forty per cent. of those who used pre-risk preventives were found to be infected. That is important. If you can get these things done as you would as a chemical or a physiological experiment in a laboratory, you could be pretty well sure of a large amount of immunity; but if the application of these preventives is to be carried out by men who are drunk, excited, unskilful with their fingers, and it is done behind a hedge or haystack or in a copse, you will have a correspondingly large number of cases of infection. With this every one will agree. If you could be certain that the things were going to be applied as they should be it might be different. In a great many cases the risk is taken several times within a few hours, and no man under such circumstances would carefully prepare himself every time. Under ordinary working conditions, as I call them, there would be a very much larger number of infections than there would be if the precaution were taken absolutely *secundum artem*. I am sure that since the use of these methods induces a feeling of security, you will get a very much larger number of men running the risk. When the Navy and Army melts into the civil population you will have to advocate these things for civilians if you wish to have any good result from

them. Four out of the five men I mentioned above who came to me said they were lined up and told about these outfits, and thought that, as they were having leave, they might as well have a good time. I think for these reasons you will find that a great many more risks will be taken. It is impossible to estimate how many more risks will be taken and how many more cases of infection will accrue, but I myself believe that the number of risks taken will be as ten or twenty, or even more, to one compared with the number at the present time. Literally hundreds of young men have talked to me on the subject of venereal disease, and I have told them in plain language the same sort of thing I have told the soldiers, sailors and young women during the last few years. I told them about hereditary disease and blindness and other forms of illness, and the men have said to me, "I am never going to run all those risks." That convinces me that with education and knowledge a large number of these young men will keep straight. If you destroy the sense, I will not say of fear, but the sense of consequence, and thus give them a feeling of false security by the use of preventive chemicals, you will get an enormously larger number of risks taken and infection contracted than if you let the thing alone. You will have to include the civil population: it is not the slightest use confining the use of outfits to the Navy and Army. It may be that with the Army it was, in part, a question of keeping the men fit for fighting, but it is just as necessary to keep the men fit and well for the fight in civil life afterwards. With the hordes of young men and boys in rural and working districts—if you put it to them that here is a vice in which they can indulge with comparative safety if they use these methods of prevention, you will get an enormous number of extra risks taken, and therefore you must provide outfits for civilians and educate them in the proper use thereof. And what about the women? That is a question which not a single man or woman who advocates these preventive methods has yet taken up. Every infected woman means an infected man, and every infected man means an infected woman. I do not think you will do much good if you leave out the women. The diseases are not being spread solely and wholly by professional prostitutes, the number of whom is now very much less than before the war, because a large number of the older ones have died off, and a large number of the foreign ones have been deported, and there has not been the same influx into the ranks from young girls out of work. Girls have gone wrong through the wave of

sentimental patriotism which has gone over the country. Out of a hundred and twelve soldiers taken into Rochester Row Hospital, only fourteen were infected from professional prostitutes; the others were infected from flapper girls. What are you going to teach your flapper girl? Talking at Birmingham I held forth as an absolute necessity the spreading of knowledge, and one man asked at what age it should begin. I said they had best begin at fourteen or fifteen. He said, "That might be all right in your class, but not here. By the time they are that age they are already running the risk in the factories." How are you going to deal with these young people? Are you going to tell them that if they wished to kick over the traces they would have to take chemical preventives? If you wish to spread the knowledge of these pre-risk of infection methods, you will have to include the women, and be perfectly certain that every one has a proper demonstration in the use of the preparations. How is information to be spread broadcast to both sexes? You can do it on a battleship or in a regiment perfectly easily; you can, to a certain extent, do it for the workmen in the shops if you choose. But how, when, and at what age are you going to instruct young women and girls, and who is to give the instruction? And then, how are the packets to be supplied? Are they to be bought of chemists? Are they to be exposed for sale publicly in shops like Malthusian preparations, or are they to be obtained from penny-in-the-slot machines, and how are they to be advertised? Does any advertisement of them come within the Law of the land? I think it does. It has been pointed out that persons getting the idea that they can treat themselves by these packets will lead to a very great deal of loose treatment, not to quack treatment, but to self-treatment. They will think that here is something which can be done for themselves, and they will use it, but they will not succeed. I am absolutely certain that if this matter of pre-risk of infection prophylaxis were carried out in the way it must be to be logical, the results will be most detrimental to the population in every possible way. The question of the other school, the post-risk of infection treatment, or prophylaxis, I will take next. That treatment has been used very largely, and used in many ways, and the figures with regard to the American Navy are extremely illustrative. Out of 1,180 men who used what I call preventive early treatment one hour after running the risk of infection, one man got the disease; out of 1,172 who used it within two hours seven got the disease; and then the figures go on up to four hours,

when less than one per cent. got it, and out of 2,583 only eighty-one (?) got it if they used this treatment up to ten hours after running the risk. Of course there are several ways of carrying this out, but it comes very close to the pre-risk method if men have issued to them packets which they can use themselves without going either to a station or taking the advice of a doctor or a skilled attendant; but they may have been able to use packets in a certain way, which in many cases has done a very great deal in checking the disease. When they have been used properly, the success has been practically as great as the success of the other method. As to my objections: In the first place, a large number of people have asked what is the difference between 10.45 and 11.15. I draw a very great difference between them. My idea is, that if a man were to come to me in the morning, and say, "I am going on the loose to-night; can you tell me anything I can do to keep myself safe?" I should say, "No, I am not going to be a party to your vice," but if he came to me and said, "I have been a perfect fool; can you do anything for me?" I would tell him at once. It is a very different thing; he is then potentially a sick man, and I should do the best I could to prevent disease developing, and save him from becoming a danger to himself and to the innocent population. Another great difference is, that if a man at 10.45 uses chemical prophylaxis, and is drunk, or excited, or clumsy, it is very different from having the same preventive treatment applied by a doctor or skilled orderly at 11.15, and the chances are that the 11.15 treatment would be very much the better. If the man himself used preventives at 11.15, you would eliminate one of the causes of the failures at 10.45, because you get rid of the excitement. In regard to the expense and difficulties of installation of treatment centres, that is a matter which at present is under the consideration of the Local Government Board. There is no doubt there will be a good deal of expense and difficulty in installing places, but if the matter is of such intense importance to the health of the community, there is no question that a large sum of money ought to be spent upon it to save people becoming infected if possible. One of the difficulties of the question is that of attendants. You must have some one in attendance—an orderly for the men and a nurse for the women; but these are difficulties which can be overcome. There is also the question of rural and thinly populated districts. At the present time these places are more free from syphilis than others, but they will not be after demobilisation, when you

have men coming back who may be infected, and girls coming back from factories who may also be infected. The difficulty in the thinly populated district at the present time is to get men to a clinic where they can be treated. These pre-risk infection outfits have been tried by the Americans and discarded by them. I have a letter from a gentleman who has been on active service for four years. He is a Colonial, and presumably has had to do with Colonial troops; and, writing about my statement in the *British Medical Journal*, he says he has had a large number of men come to him after using the preventives, and he had found them suffering from syphilis and gonorrhœa, although the men had said that could not be so, because they had used the preventative ointment. There is a memorandum from Colonel Snow, published, I think, in the *Morning Post*. It is dated a fortnight or three weeks ago, just after the Russell Square Meeting, and in it Colonel Snow says: "The United States Army began about 1912 seriously to grapple with the venereal disease problem. Finding itself unable to control in any way the exposure of its men, since this occurred during their liberty among a civil population indifferent to the existence of commercialised prostitution and the exploiting of soldiers, attention was directed to: (1) warning the men through lectures upon the dangers of venereal diseases; (2) supplying the men with prophylactic packets, which they were advised to use if they did have sexual intercourse; (3) the early detection of infected men among the troops by frequent inspection. Out of these earlier efforts grew the regulations requiring a man to report to the office of the regimental surgeon immediately on his return from liberty for supervised prophylactic treatment (early treatment) and the penalties of court-martial for failure so to do, and loss of pay if venereal disease developed. It became evident that, for various reasons, the men could not be relied on to use the packet promptly and thoroughly, and the emphasis came to be placed entirely upon the prompt reporting to the regimental infirmary for the required early treatment. The packets were obtainable at a slight cost at the post-exchanges, and the men were still advised to avail themselves of them if they contemplated having sexual intercourse while on liberty. The gradual shifting of emphasis, however, from theoretical advantages of the prophylactic packet to the practical administrative advantages of the early treatment during the period 1912–1917, convinced the War Department that the packet should have no official status in the enlarged programme for com-

bating venereal diseases adopted upon entering the present war. Instead, the civilian authorities and population were asked to co-operate in every practicable way in keeping the men sober and continent while on liberty and furlough, and early-treatment military stations were established in cities for those men for whom protection or self-control failed. In France, those men who were going to points where early-treatment stations are not available, have, in some instances, been provided with packets unofficially, but the results have not commended the re-introduction of this method. The important points are believed to be: (1) to keep the men from exposure; (2) to get those men who have been exposed promptly under the advice and care of competent officers of the medical department. Any offering of any alternative self-treatment, even though distinctly stated to be of limited value, seems to lead to confusion and a lessened observance of the regulations regarding reporting to the early-treatment station. Statistics before and after the entrance of the United States into the war do not give a fair picture, because of the many complicating factors which have to be considered in the transition from a small army on a peace footing among an indifferent civil population to a great army of drafted civilians under the conditions of war, and influenced by intense public feeling supporting a programme of prevention of venereal diseases. Still, the fact that the pre-war rate of approximately ninety per thousand as an annual rate may be paralleled by analogous war-period rates of less than twenty per thousand in the United States, where community co-operation is fully counted on, and between thirty and forty per thousand in France, gives the department added confidence that its programme is essentially sound, medically as well as morally." What I think we should do in regard to preventive measures, is first of all education. Let every boy and girl launched into the world know what these diseases mean and all about them. That can be done by lectures to boys and girls of proper age, which in the upper classes would be rather later than in the industrial classes. It has to be very tactfully managed, and you will have to find the right age. I think you ought to begin by the fathers and mothers teaching the facts of life very early, and teachers should lead up to these facts through botany and similar subjects until the children become old enough. Educate as much as you can, and I am perfectly certain that lectures pointing out to young men the dangers of these diseases, appealing to their chivalry, their patriotism, their honour, will have great effect. I

have often been three or four times to different war camps, places where men have been in training for a considerable time, and I have asked the Commanding Officer whether it really does any good or not to lecture, and in every case he has said, "Should we have asked you to come again and again unless we thought it did?" In the first place, a large number of men who had been hiding their sickness had come forward and reported it, and the number of cases of which they became cognisant during the time that particular unit remained at the depot diminished from eighty to fifty per cent. I appeal to the men's patriotism and their chivalry, telling them that if they expect their womenkind to keep clean they must do so themselves, or they are not playing the game; and I put it to their sportsmanship. If you can get at young men and girls in that way you will be doing a great deal of good. I lay stress on recreation out-of-doors for boys and girls, because if you can get them fit in trying to keep fit they will not kick over the traces. You must drill into the boys the dangers of both drink and women. I am certain that the establishment of girls' clubs, and especially of mixed clubs, is a great thing—a club where a girl can go and meet her young men friends and dance with them, managed by a woman old enough to be a chaperon, but not too old to have forgotten that she was once young. You will have to have a great many more women police patrols to deal with young girls. And then comes the crux of the whole thing—early marriage. If you can only arrange economics in such a way that there can be early marriage, you will do away with a large amount of this trouble. You must also have treatment available within reach of every sufferer, early and continuous treatment. It is no good for an infected person to go once a week to be treated for gonorrhœa or anything of that sort. They want a place where they can go and be continuously treated, and it is up to the State to provide such clinics. I am also certain there should be ante-natal treatment for pregnant women, both for the sake of the woman and of her child. I think we can do these things without outraging the sense of the nation by publishing information about pre-risk infection prophylaxis.

1. THE CHAIRMAN. The condition quite reasonably urged by Sir William Osler and Sir Bryan Donkin was that you as a profession had nothing to do with the moral side of this matter. If the profession divorces itself from the moral and ethical question, it will be no use parsons and other people bringing that moral question up, and I think

that practically the weapon is taken out of the hands of the average citizen, and still more of the average teacher. Would you object to that?—Not at all. I think you cannot have the thing much better expressed than in the letter written by Sir T. Barlow in *The Times*. I associate myself absolutely with that letter. I think Sir William Osler, when speaking about morals having been tried for fifty years, should have said "morals plus ignorance." I was one of the two people who started the agitation that led up to the Royal Commission two- or three-and-twenty years ago, and I have come to the conclusion, looking at it entirely as a physician and a man of the world, that whatever you do you will never really succeed unless at the same time you go in for a high moral standard.

2. Are you ever consulted by parents as to what they should do?—In the last five-and-twenty years I have given instruction to considerably over a hundred boys at the request of their fathers upon the boys leaving school and going to the University or Sandhurst; and since the war began I have spoken to a large number of boys just entering the Army.

3. If the father is a sportsman, and a fellow his boy can look up to, the boy will on morals, and especially on this particular question, take more notice of his father than of his mother?—I am sure of it. The question of age depends so much upon the surroundings of the child. A child living in the slums and in a room with ten other people wants to be instructed infinitely earlier than a child more favourably placed.

4. Sir William Osler and I think Sir Bryan Donkin agreed that the post-risk infection methods were more successful than the pre-risk methods?—They are. It is so very difficult to get reliable statistics. I believe that the post-risk methods are bound to be more efficacious than pre-risk methods.

5. You would be against giving to anybody before the risk anything to be used after the risk?—It is a difficult question, because probably in sparsely populated districts it is very difficult for men to get things. If you look at it as a purely clear-cut medical question, I should say do; but ethically I believe that the best thing is that the man should resort to some place where he can be properly treated.

6. You have carried it up to ten or twelve hours; have you anything to say in regard to the risk of infection after, say, twenty-four hours?—I should say twenty-four hours' treatment would be extremely doubtful.

7. You lay stress upon early marriage; can you tell me any conceivable means by which, under present social and economic conditions, there can be early marriage?—I do not really see how, under present conditions. Of course among the industrial and working classes marriage is generally much earlier than among the educated and higher classes. The ideas of young persons in the upper middle classes are so expensive, that unless they happen to be rich people, marriage is absolutely impossible. Girls will not go into a small house with one maid; they want to begin where their fathers are leaving off.

8. DR. SALEEBY. Those of the school opposing you are of opinion that disinfection after exposure is the most efficacious?—I believe they have rather come round to that.

9. The time factor is extremely important?—I agree.

10. You have said that where the difficulty of meeting the time factor, as, for instance, in the country, is too great, you are prepared to provide material to be used after exposure?—I do not go so far as to say that. I believe it would lead to an increased number of cases of risk, and thereby to a certain extent to an increased number of cases of infection. If good in isolated cases, it might not be to the good of the community to provide things for use afterwards. The previous provision of what is to be used subsequently I believe would, in a certain number of skilled, competent, sober people, diminish the number of cases of infection, but if universally and publicly advocated, and if used clumsily, it would not have the same effect.

11. In the letter in the *Lancet* last Saturday the question raised is of the application by a man himself who had been previously provided with permanganate, or his resort to a place where he should be treated by somebody else?—I should infinitely prefer the latter.

12. The advertisements which the National Council issues, and which they get the Government to pay for, proclaim the extraordinary efficacy of early preventive treatment?—The people who see these things are generally people who are a little frightened as to what might happen, and if they do kick over the traces they go and get early treatment. For such people I prefer to call it "treatment" rather than "prophylaxis," because they are already potentially sick people.

13. Is it true to say that nothing has been suggested or done about women and girls?—I have never seen anything. I have seen questions brought before "our" Committees

as to the possibility of early treatment afterwards, but I have never seen any preventive outfit for women.

14. What about the Law of the land, and publication?—You have to get the Law altered. The present Clause was inserted in the Act, not in regard to prophylaxis or anything of the sort, and was really in regard to quack advertisement and treatment. As to writing about prevention, the Journal Committee of the British Medical Association went to the Home Office, and asked how far articles written in the *British Medical Journal* and other papers came under that Clause, and the authorities said they would very much rather not have to define it, and that we had better go on until we were prosecuted. I think myself if these facts were not published you would get a fewer number of cases of venereal disease among the civil population.

15. I suggest that the civil population, which is not disciplined, is more likely to avail itself of these things than to go to centres for treatment?—I should think it extremely unlikely. I think the civil population would be very much more likely to go to a centre where they could get treatment for nothing than to pay even a few pence for materials. It also pre-supposes the fact that some time beforehand they had contemplated "going on the loose," but seventy-five per cent. of the risks run are more or less cases of sudden temptation and impulse, and consequently they would be much more likely to go to a centre than to have the outfit in their pockets beforehand.

16. It is often suggested that prophylaxis should be abandoned and early treatment adopted?—I should prefer that prophylaxis was abandoned and early treatment extensively taught under the supervision of the officers of the clinics.

17. Dr. Scharlieb. You have heard of the admirable treatment for pregnant women in the London and some of the other hospitals?—It is exceedingly good work. The women do exceedingly well, and the children are born healthy.

18. Dr. Porter. It is absolutely essential there should be some sort of explanation of a practical character given to these people with regard to the use of these things, even potassium permanganate?—I think it absolutely essential. I do not think any man would have the slightest chance of applying them properly if he simply read a paper.

19. You think they could not be properly instructed by means of leaflets, and that you would have to get at the people?—You must get at the people.

20. A great difficulty, so far as the civil population is concerned?—An insuperable difficulty.

21. At these big lectures of yours, you could not possibly instruct with regard to these preventive things?—I have frequently told soldiers to go to a preventive place if there is one set up in their barracks. But I have not stood up on a platform and given all details.

22. Do you think a respectable percentage of them would grasp it?—I do not know. I would never, after appealing to everything the men hold sacred, tell them if they were going to "go loose" how they could do it with little risk. I do not try to frighten them, but I have had eighty men faint at one lecture. The fact that they had all been inoculated for typhoid the previous day may have accounted for some. I have rarely lectured without one or two men fainting.

23. COLONEL BOND. The difficulties of treating women and girls are going to be enormously greater than those of treating men?—Yes. If I were whole-heartedly in favour of prophylaxis, I should say, treat the men and see what happens, and then deal with the women and girls.

24. With every packet for pre-risk treatment there should be enclosed a well-drawn-up leaflet urging continence and so on?—It would be an improvement.

25. How far would thorough treatment with soap and water and cleanliness after infection be as equally efficacious as the rather more complicated treatment of antiseptics?—There you want experience, but I should think it would be almost equally efficacious.

26. DR. ROUTH. If a civilian goes wrong, and uses a packet, he will think he is safe, and will not go elsewhere, but afterwards a large number would find they had syphilis; that clearly is the danger?—Yes; that is clearly what Colonel Snow meant.

27. If the civilian population were adequately provided with the means of getting these packets, the time would come when every prostitute would have her packet?—Yes, in the same way that some prostitutes are now going about flourishing certificates of soundness under 40 C., D.O.R.A.

28. Would there be any effect on a prostitute having intercourse forty times a day with men who had protected themselves with ointment?—That is a matter which would have to be considered. I have been told that some professional prostitutes try to protect themselves with mercurial pessaries.

29. DR. MARIE STOPES. I cannot see what is the conflict

between the two schools. Why should not prophylactic outfits be sold on the same basis as disinfecting sprays?—Sir William Osler and I hold different opinions. He has, to a certain extent, shifted his ground from the entirely pre-risk of infection method to the post-risk, contemplating that an outfit will be supplied to the person beforehand.

30. DR. SALEEBY. Sir William Osler wants these things available for people to have upon them in readiness for use, and you do not?—Yes.

31. DR. MARIE STOPES. If they save even another ten per cent. of cases, why should they not be available?—Because of the false security and the enormous risk that would be taken, which would cause a great deal more than ten per cent. of additional infection. You have either to put it down as practically absolutely safe, or else to let it alone.

32. LORD WILLOUGHBY DE BROKE. Venereal disease is very much on the increase?—Yes, it is now to a certain extent, and it will be very much worse when demobilisation is complete.

33. There is some known chemical or physiological preparation which you doctors know, which, if applied both before and after, does, at any rate in a great percentage of cases, tend to prevent the disease declaring itself, whether the preparation is contained in these packets or the old-fashioned prophylactics or permanganate plus calomel. Is that so?—If I wished to kick over the traces, and were to prepare myself to the utmost of my ability before and after, I believe I could succeed in protecting myself from any risk whatsoever.

34. What is the actual medical difference between the preparations which you contemplate being supplied at early-treatment clinical installations and the curing and prevention preparations used by a competent man who can treat himself?—No chemical difference; there would be a mechanical difference. I think irrigation would be wanted at an early-treatment centre as an early preventive.

35. Would the application of a solution of permanganate with a swab be very difficult—the personal application?—I believe if a man had been taught how to apply it, and had been given demonstrations, he would be able to do it.

SIXTEENTH DAY

Monday, February 24, 1919

DR. C. W. SALEEBY, F.R.S.ED., in the Chair

Statement of MRS. STOCKS (Member of Family Endowment Committee)

IF you take the least desirable classes of the community, the birth-rate is at present almost entirely irrational and unrestricted; there is very little conscious restriction as a result of economic pressure. The casual labourer, the under-employed worker at present does propagate as fast as he can. But if you go above that class, to the wage-earner who has begun to secure a standard of living and who has begun consciously to restrict, we believe that the financial anxieties of parenthood can be partially removed, and that by removing them we should possibly relax the present incentive to restrict the birth-rate. Therefore we were led to the conclusion that it might be possible to relieve the burden of parenthood in that class which is above the lowest level without having any very appreciable effect in stimulating the birth-rate in that class which has no real standard of subsistence. That is why we do not anticipate that the general granting of allowances to all mothers, irrespective of class or income, would lead to a very great stimulus of the most undesirable part of the population. A great number of people, when they are faced with our scheme, immediately say to us, "Is that not exactly like the Speenhamland system of indiscriminate out-relief given at the end of last, and the beginning of the present, centuries?" That system, which included the giving of allowances to parents in proportion to the number of their children, in the form of out-relief, did lead, according to records available, to a very great increase in the pauper birth-rate, in the volume of pauperism and in the burden of the poor rate. It was abolished in 1834. The system we propose differs fundamentally from that system of Poor Law allowances in this respect: those Poor Law allowances were given to persons who received either no wages, or else inadequate wages, so long as, and no longer than, they continued to receive no wages or inadequate wages. That is to say, pauperism was made a condition of the allowance, and it encouraged paupers. As soon as a man improved his subsistence level the allowance

stopped, and therefore it was a distinct stimulus to workers not to improve their level, a distinct stimulus to accept low wages and get the allowance, or no wages at all and still get the allowance. One reason why the Speenhamland system stimulated population was, by encouraging pauperism it encouraged the existence of that class where there is practically no conscious limitation of the birth-rate. If once you remove the condition of pauperism from the allowance, you remove the tendency to keep a large class of people pressed down into that state of society where an indiscriminate birth-rate exists. That is the fundamental difference which separates our scheme from the old Speenhamland system. It is also possible that, in giving an allowance of this kind—in making it possible for parents to bring up healthy children, you would provide the first condition for a progressive rise in the standard of subsistence.

1. THE CHAIRMAN. I heard you lecture a little while ago, and you said that whether or not the mother leaves home, and whatever she earns, still this allowance is to be made?—My opinion is that it would be too great an interference with individual liberty to say that an exceptional mother, who has particular abilities, should not exercise them outside her own home.

2. You would be content that the money which was given for this purpose should work out as serving some one else to do the mother's work?—I should be content, because I believe the tendency would be that the normal mother would wish to do that work herself.

3. In places like Bradford so much money has been available for the mother outside her own home that she has left her home?—Because no money is available for her in it.

4. You would be prepared to have the money available for her in it, and yet let her go out and make more?—I think I should, so long as the standard of her children's health and moral condition was what it should be.

5. The socio-economic principle of this allowance is not to compensate the mother for work done, because whether she goes to work or not she gets the compensation?—Some one has to do the work, and the person who does the work will get the compensation. We assume that, in the majority of cases, it will be the mother.

6. Your system makes no provision to see that it shall be the mother?—No, but we assume that it will be the mother in the majority of cases, when once the conditions of the mother's work are made tolerably decent for her.

7. Even although she could earn five times as much out-

side?—We should allow her to do so; it might, under certain circumstances, be advisable that she should.

8. Dr. Schofield. May I suggest that the mother under your scheme is best off if she confines herself to producing one child and no more; it is a direct incentive for her to do so?—That can easily be avoided by making the allowance greater for subsequent children.

9. Say five shillings for the second child instead of the first?—The first child generally costs more than the others.

10. What most people desire is motherhood, not the amount of motherhood?—I think most married couples see that the life of one single child is not the most satisfactory.

11. Do you suggest that the figures in this book, *Equal Pay and the Family*, are capable of modification?—I do not think any member of the Committee would adhere very strictly to the figures suggested there, partly in view of the changes which have taken place in the cost of living.

12. Dr. Routh. The mother is to get twelve shillings and sixpence per week for five years?—Yes, so long as her child is alive.

13. She is to get twelve shillings and sixpence whether she restricts or not?—Yes. The Committee has not considered the possibility that our mother's allowance puts a premium on restriction, but we have met with very strong feeling in favour of merging the mother's allowance into the children's allowance, giving the allowance solely by virtue of the children, and making it a larger allowance.

14. Supposing the mother dies, who would receive the mother's allowance?—We propose it should be paid to the father or any other legal guardian, who would be very much in the position of a mother who goes out to work and pays some one else to look after her child.

15. Would twelve shillings and sixpence be given then?—Yes; whoever does the work would get the twelve shillings and sixpence.

16. I think you propose in your book to pay to any one with an income of less than £700?—To every one, whatever their income.

17. Who is going to pay for this £240,000,000? It will largely come out of the pockets of those who are making their £700?—There are two alternative schemes. Under the first we should pay a flat rate of allowance—the same allowance for all grades of income—in such a way that people who are getting £700 would actually be paying taxation of more than, or as much as, they got out of their endowment allowance. Under the second scheme we have graded the

proposed taxation in such a way that people with under £700 would receive, whatever their income, a net advantage of £50 a year, until above £700 a year, where the taxation would begin to eat up what they received.

18. Have you any figures of what the allowance was under the old pauper scheme?—It varied from county to county, but roughly it was subsistence level. Any one earning less than was regarded as subsistence level got an allowance made up to subsistence level. At one time it was a few shillings a week; in one parish it might be five or six shillings a week, and in other parishes it might be more or less than that; it was a very low and insufficient level.

19. THE CHAIRMAN. You would argue that the practice of the State in introducing separation allowances is at least in conformity with your principle?—Very much so.

20. What do you say to the regulation regarding the post-bellum army, that "separation allowances will not be given to the families of men who marry after the date of this leaflet"? What do you say regarding the effect of that? Would it do honour to parenthood?—No. Presumably the result would be to reduce the possible number of marriages or of children after marriage.

21. DR. ROUTH. If a woman knew that she was going to get this allowance if she had a child, don't you think it would encourage her not to suckle her child, but to get back to work as soon as possible, if she knew she could get very good wages and at the same time pay some one else out of the allowance?—I think it would be a greater inducement not to suckle her child if she was entirely dependent on her wages, knowing that if she stayed at home the family income would not come in. If she wished to suckle her child the home allowance would enable her to do so, even if her husband's wages and her own were insufficient.

22. If a woman, tempted by this allowance, was expected to be away so many months, her work would be looked upon as being fairly likely to be discontinuous, and that would make the employer give her a lower wage?—I think it would withdraw a large number of women from work altogether.

23. There is the suggestion that the scheme should first be applied to the families of men in Government service?—I think we all agree to that.

24. What would trade unions say if Government clerks were going to get twelve shillings and sixpence a week for their first babies and they, the trade unionists, were to get nothing?—They would want it too. It has not been the recent experience that one class of labour resents improve-

ments in another class. We have not heard any great outcry because soldiers' wives received separation allowances, nor did we when the system of family allowances was extended to officers.

25. COLONEL BOND. What are the real objections to confining the allowances to the children, or to the home-keeping mother?—I think our feeling was that it might be very hard on a number of particular cases—on the woman who had distinct abilities of some kind, but was not exactly a very good mother. She might be quite good at producing healthy children, but not at her best in devoting all her time to looking after them.

26. Have the Committee considered the limitation of the endowment as a primary step to widows, or women whose husbands were incapable, from physical disability, of earning a living wage?—We have, and I think we are quite ready for the moment to concentrate our energy on working for widows alone, as the most urgent aspect of the question.

27. Have you considered the probable cost of that?—Miss Rathbone and I did very roughly, and with insufficient figures on which to base our calculations, and we brought it to somewhere about £40,000,000 a year.[1]

28. The Committee would regard that experiment as very valuable?—Yes, partly as a step and partly for its own sake, as solving the most urgent part of the whole problem.

29. MRS. JOHN CLAY. If it is possible to make an experiment on one particular class of motherhood, why is it not possible to adjudicate this on any other principle than a flat rate? Why should mothers of distinguished ability not have the choice of whether they earned money outside the home and were not paid by the State, or whether they remained in their homes and were paid by the State?—Possibly if their earnings were sufficient it might not prejudice them very much. Our attitude was that it was unjust to take one class of women and confine them to one career only. They would be paying out of their wages for some one to look after their children.

30. One reason for the mother staying at home is that the family might be larger?—I fully agree that the best person to look after the children in the great majority of cases is the mother, but I think that the question must be left to her; any attempt at legal compulsion is curtailment

[1] Subsequent calculations give an estimate of between £20,000,000 and £30,000,000.

of liberty, and an unnecessary attempt to dictate careers to people. I do not think the Committee responsible for issuing the scheme would wish to see it amended in that way, but we might prefer it so amended rather than that it should not go through at all.

31. THE CHAIRMAN. The economic theory is for payment for work done?—It is invidious to talk of payment to a mother; it is putting into her hand the resources for doing her work at home properly, for in many cases to-day she cannot do it at all.

32. How are you to know the money is being spent on the mother and the child?—We propose to test whether the money is being spent on the child by the condition of the child. The allowance is not so much that a man could live on it in addition to the mother and child; in case of an attempt to do so, presumably the state of the child would show it, and the man would be proceeded against for misappropriation.

33. Does the Committee think it necessary to teach mothers that they have a duty to their children?—We presume that the best way to teach a person to do a certain thing is to give that person the means of adequately doing it.

34. Will you take any cognisance of character, or shall we have just a large army of children of the criminal classes and the unfit?—The real logical addition to a scheme of this kind would be State control of parentage. As regards physical condition, it might be logically and eugenically desirable, but it has very grave and very far-reaching moral drawbacks. Under our scheme we should be obliged to pay allowances to parents who eugenically ought never to have been married, but so long as parents spend the money on the children, and maintain them under conditions required by the law as it applies to all parents, we are not prepared to go any further in investigating the character of the parents.

35. You are going to inspect them?—Yes.

36. By what machinery?—All that exists, and more that will be created, such as infant welfare centres and clinics. We should have to institute home visiting, but we should like to restrict that as much as possible. As soon as the children reach school age they would naturally be inspected by the school authorities.

37. Are you in favour of the medical inspection of pre-school-age children?—Yes. We hope that the machinery of baby clinics will be extended and become the main system for inspection.

38. Do you propose to make any ante-natal provision?—

I believe that is provided already by a large number of agencies.

39. DR. ROUTH. What does this £200,000,000 include?—It is a very haphazard figure. It includes administration.

40. We were told by some one from America that half the cost of the endowment of motherhood in certain States was due to the cost of inspection and administration?—I believe the administrative costs of our scheme would come out at a very much smaller proportion, owing to its enormously wider scope.

41. MISS MICHELMORE. Would any system of inspection by the local authority be done under the Ministry of Health?—We propose that whatever is the local authority under the Ministry of Health should be our authority.

42. You have two opinions about the treatment of unmarried mothers?—Yes.

43. What is the alternative?—Some members of the Committee wish the unmarried mother to receive the allowance in the same way, and at the same rate, as the married mother—that there should be no difference. I think the majority take that view. Miss Rathbone, however, argues that this scheme is made to fit a healthy society, and that the unmarried mother and her child represent a social sickness; she wants them treated, but not as part of this scheme.

44. Both by the Ministry of Health, but in different departments?—Possibly. There might be a stricter system of inspection, or there might be some kind of disability attached to the allowance.

45. THE CHAIRMAN. Your whole committee is agreed that you want the illegitimate child catered for as well as the legitimate?—Yes.

46. SIR EDWARD BRABROOK. The unmarried mother having been disposed of, how do you deal with the unmarried father? You give him only the wage of a single individual, if not married at all, and yet he might have quite a large number of illegitimate children whom he ought to provide for?—I think that if the treatment of the unmarried mother were separated from this scheme it would probably include getting the allowance, not out of the State, but out of the father.

47. If the State provides for the wife and family, the wages earned by the father must be limited to that which is necessary to provide for himself; but if a gentleman, in the exercise of his discretion, chooses to become an unmarried father, he is bound to live on the same amount of wage which he would get if he were a single person. Is that not very

unfair to him?—Unless his "unmarried wife" were in receipt of allowances.

48. Your theory is that the production of children is a service to the State for which the State should provide. I do not quite see the distinction between the protection of a child which is legitimate and a child which is illegitimate, and who, according to frequent observation, is even a better member of society—a more virile member of society—than the legitimate child?—If we assume that the production of illegitimate children is a service to the State—as good a service as the production of legitimate children—of course the logical thing to do is to endow them equally, in which case the unmarried father would be no problem at all, because the unmarried mother would get her allowance; but if we begin to assume that the production of illegitimate children is not so good a service, that alters the case. Personally I think we may assume this, in view of the fact that the unmarried mother is invariably a person of weak character—not as a rule the type from which we would wish to see the race recruited.

49. You do not produce any check on the part of the upper classes to the limitation of families, and are encouraging the spread of families in the lower classes. Are you not intensifying the evil which already exists?—I imagine that when you get into high-class incomes, say above £700, you do not find any great economic check at present operating. We hope that our allowance would make itself felt among the lower-grade skilled workers—the workers who already have a standard of life, and are restricting their families for economic reasons.

50. COLONEL BOND. You could not cut out the casual labourer and his family, and limit it to the struggling class whose family you want to help?—I think it would not be feasible, partly from reasons of sheer humanity. It would be more logical simply to exterminate all physically undesirables, but nobody proposes that it shall be done.

SEVENTEENTH DAY

Monday, March 10, 1919

THE BISHOP OF BIRMINGHAM in the Chair

Statement of DR. MARIE STOPES

THE basis of my position with regard to what is called "birth control" is fundamentally religious as well as

scientific. The true ideal for the main stream of humanity is a plexus of homes, each centred in a monogamic, deeply loving pair, surrounded by healthy, happy, and beautiful children. This can never be universally attained without the instructed use of "birth control" methods.

A married couple is a welded pair, a higher unit, whose existence and potentialities depend upon the physical condition of the material body of each of the pair, and of its interplay and exchanges. Medical science has been slow to discover the physical basis of the fact, of which the true lover and true mystic are conscious, namely, that the two who are perfectly married are, after marriage, of a higher order of being. That is, each is no longer a simple unit, but the two are fused and merged into a pair, and this is partly based upon, and is correlated with, the physical exchange of chemical and ultra-chemical particles. Hence the insistence, so often made in the name of a false Christian morality, that the act of physical union should take place only for the procreation of children, not only ignores profound physiological truths, but degrades one of the greatest religious truths. On physiological, moral, and religious grounds, therefore, I advocate the restrained and sacramental rhythmic performance of the marriage rite of physical union throughout the whole married life, as an act of supreme value in itself, separate and distinct from its value as a basis for the procreation of children. Owing to certain peculiarities inherent in our bodily structure, which are the result of our long animal ancestry, this act of union cannot take place in most circumstances without the probability of conception on the part of the woman. In the interests of the potential children of the race, no conceptions should be allowed save those ardently desired and welcomed; and as there are myriads of potential conceptions which must, on various grounds, be a source of fear instead of joy to the woman, it is, therefore, logically necessary that some means for controlling conception must be available for all united pairs.

Many have advocated total abstinence or "self-restraint" on the part of the husband over long periods, even years, as though the marriage act were a mere animal act of indulgence on man's part alone. In my opinion this is an immoral and debased outlook. The marriage act should be as much desired by the woman as by the man, and should, and does, when properly consummated, affect her physiologically, mentally and spiritually as profoundly as it affects the man. The importance of the completed orgasm, the after union, and the potentialities of the action of various hormones

released by sex acts, have, so far as I can see, not yet been taken into account by the Commission, although such factors are of vital concern. There comes a time in millions of marriages when the married pair have already all the children they can feed and prepare for life's duties, and when they have still the God-given instinct to unite with each other, and yet the material facts of existence may make it a disaster for another child to be born. For such a married pair there are only four alternative ways out—

1. An abortion criminally induced, of the already conceived embryo, leading to grievous possible injury to the mother and to future children she may bear.

2. Preventive methods—

(*a*) Many of those widely advocated, which are, in my opinion, inadvisable, leading to safety from undesired conception.

(*b*) The safe and harmless method which I advocate, or a better, yet to be discovered.

3. The use of the so-called "safe" or inter-menstrual period, sometimes giving safety from conception, in many cases not at all safe—a snare to a naturally prolific pair.

4. Enforced abstinence over long periods (*see* below).

The effect of enforced abstinence on three main types has to be dealt with: (*a*) The ascetic or intellectual, himself somewhat undersexed, often engaged in intellectual work till late hours, which tends still further to divert sex, who may find sexual abstinence both easy and apparently beneficial. (*b*) What I should describe as the rhythmic type of man—a man well sexed, with strong will and control, and with a natural tendency to definite waves of sex impulse, which may be so far apart as every six weeks, or as near as every two or three days. These may also be to some extent seasonal. In such a man abstinence is much more unnatural than in (*a*), and may be in the nature of physiological starvation. (*c*) The rather animal, strongly sexed type, with an under-current of physical need which is scarcely intermittent, to whom complete and enforced abstinence for more than a few weeks or months may be physical torture.

These are merely three main types, but there are infinitely more varieties of men in our present civilisation. To all these types a regulated self-control and the cultivation of will-exerted command over his desires (in order to meet with his wife's needs) is beneficial. Type (*a*) may benefit by years of abstinence, but if a husband of the type (*b*) or (*c*) is told that complete abstinence, extending over years, is his

moral duty, there are the following possible results: (*a*) Ultimate nervous breakdown, and the wrecking and degeneracy of his general powers; (*b*) the secret occasional indulgence in a mistress, with remorse and a bad conscience afterwards; (*c*) the definite employment of a mistress or a prostitute; (*d*) the practice of conscious self-abuse, with probably the slackening of the will-force concomitant with this; (*e*) a semi or unconscious self-abuse in sleep, which, though sometimes healthy, is often a source of physical weakening, and, in some instances, has other and rather serious effects. Of the effects of long-continued and enforced abstinence on the woman to whom he is mated, his wife, which may be disastrous, those who advocate complete abstinence seldom think. Enforced abstinence, so often urged in the name of morality, is under many circumstances in reality immoral. I should mention here, perhaps, that "self-control" is used by some as synonymous with complete abstinence, and by the laity often so understood. On the other hand, "self-control" is used by many to indicate the evil practice of *coitus interruptus*, as well as various other practices. The confusion of terminology due to hypocrisy and prudery is the present source of much misunderstanding and abuse. In the name of morality, too, is also advised the "safe" period, but in the name of a higher morality I condemn that, for the following among many other reasons. In the first place, for a great number of women with strong reproductive tendencies it is a cruel lie, for they have no "safe" period. On the other hand, where the "safe" period is safe, during that period the orgasm of most women is much less—or not at all—spontaneously achieved. The act, therefore, cannot be naturally complete. The sex act is only naturally perfectly completed when the woman, as well as the man, experiences an active muscular and nervous orgasm at its conclusion, and that her general waves of sex impulse are not so readily and naturally aroused in the supposed "safe" period as they are at the proper time. Consequently an act of union taking place at the "safe" period runs a much greater chance of not being completed naturally for the woman. Unless, then, the husband artificially completes the wife's orgasm, she has that imperfect, and in my view, unnatural, sex union which is so great a source of neurasthenia, sleeplessness, bitterness, family quarrels and ultimate desire for divorce, that it amazes me that ignorance of so vital a point should so long have been tolerated. In conclusion, therefore, until humanity has evolved physically into quite

another plane from that it is now entering upon, the greatest brains, and the most careful methods of research, and deepest religious sanction, should all be given to the physical problems of the control of conception, so that the pair may be allowed to develop to their highest potentiality, not only as parents of children, but as a bivalent unit in the service of God. In the meantime, as there is a method sufficiently hygienic and sound to advocate with confidence, that method should be advocated universally, and also the widest publicity given to the reasons against other methods so frequently practised.

In order to illustrate a few aspects of the subject, I should like now to deal with one or two statements in the Commission's first published Report. With reference to the "artificial" means at present employed by those who do use "birth control" means at all, much ought to be said about the varying effects of the different methods. The means, commonly considered harmless, vary very greatly in their actual harmlessness, and those who object to preventives on the ground that they do some harm, have, in many instances, much more reason on their side than has been conceded by the advocates of birth-control methods. Dr. Scharlieb mentioned (p. 270, *Birth-rate Commission Report*) in answer to Mrs. Bramwell Booth: "When I get women to confess, it is generally either that they use a douche or the husband wears a sheath." My own experience confirms the view that those are the means most commonly used. These methods are, I know, generally considered harmless. In my opinion, however, neither of them is to be advocated. The first is considered by some medical experts as definitely harmful in so far as it destroys the natural content of the vaginal canal. There are also other reasons against the douche, which I have formulated on pages 26–28 of my *Wise Parenthood*. There are, too, reasons against the use of the sheath between two normal people. The very fact that it is a distinct protection against venereal disease infection should not be allowed to have any bearing on the question of healthy normal intercourse, as has hitherto been done. Objection to the sheath I have formulated on page 22 of my *Wise Parenthood*. Neither of these methods appears to me to be consistent with the fundamental attitude towards sex union which I am endeavouring to present, for both materially reduce the benefits of true union. The widespread use of these two methods is an urgent reason for the education of the public in the better one. As regards the alternative to preventive methods in the hands of the

poorest and most burdened class, abortion criminally produced by another, or by the woman herself, is distressingly frequent. Considering only the purely physical effects on the race, alternatives between abortion and proper preventive methods are overwhelmingly in favour of the preventive methods. From the racial point of view alone abortion must be condemned, for the effects of the mechanical attempts and the poisonous concoctions frantic and distressed women take in innumerable cases have lasting deleterious effects on the woman's health, and may materially reduce the vitality of any future child. On page 279 (published Report) when asked by Dr. Newsholme, "Do you think that as methods of prevention become more widely known abortion will diminish?" Mrs. Ring answered, "Methods of prevention are disagreeable and difficult, as well as being expensive . . . and rubber articles often very difficult to buy." This pictures a very serious state of affairs, for proper preventive methods are the only alternatives for many millions of people. I have published for educated people the details of the only method I know which is neither disagreeable, harmful nor expensive; and the small rubber cap used by the woman is that advocated by the best clinics in Holland. This ought, in the interests of the race, to be universally and easily obtainable. As a result of what is now a wide experience, I say unhesitatingly that the greater part of the objections to methods of prevention are due to the very unsatisfactory methods used, knowledge of which has merely leaked out, and that when better methods are properly known and understood, the bogey of "harmfulness" which the "virtuous" can raise against prevention will be laid.

As regards the quality of children obtained from unwilling mothers by coercion, it must surely be apparent that not only the physical heredity, but the mental environment of the mother on the child during the ante-natal period, and of the home on the developing infant and school-child, are vital in the production of the right attitude of the race. What sort of people do we expect to breed from reluctant, coerced or mercenary mothers? On page 280 of the Report, in reply to Dr. Freemantle, Mrs. Ring stated: "They (mothers) will do a great deal in order to handle money. Even £5, as in New Zealand, would be a great inducement" to have a baby. In my opinion the terrible depravity of so large a proportion of our people to-day is to be traced to the fact that they are born, not of the beauty of love, to a welcome and true home-life, but are born as the

result of accident or of coercion by fettered women. I should like the Commission seriously to think what it must mean to a child to be conceived, carried for nine months, and brought up by a woman who was either passively submissive or actively bitter about her motherhood. The only alternative to such a perpetual poisoning of our race is the knowledge of the control of conception. The fear that women will not have children unless coerced is base. No human being should ever be born except from a mother who desires that child at that time. The great majority of normal healthy women do desire good families, and the million need preventive measures chiefly in order to space out their children at proper intervals, and give themselves rest and strength to do their best for each child as it comes, instead of which the family is spaced out by the misery of abortions, premature miscarriages, and infant death. Recently I have heard private facts of one of the most bitter and active of the irreconcilables in the present strike movement. He and his wife were married young. She bore consecutively seventeen infants, all but three or four of whom died shortly after birth. The man is now passionately bitter against society, which should, in his opinion, have fed his wife and fed those children better, when they would have lived. What the community must do to prevent such bitterness spreading is to teach every one that not even the wife of a millionaire can bear seventeen children in rapid succession without suffering to her and to them, for it is not a mere matter of food and environment.

1. THE CHAIRMAN. You speak of fertility being sometimes more rapid than the woman's strength will allow. You make a point of that?—Yes.

2. In Canada French-Canadian families of twelve, fifteen and twenty are quite the rule, and you see perfectly healthy women who do not seem to me to be in any way the worse for it. Is it not something in our own social condition rather than in the mere fact of marriage and the performance of the marriage act?—I think undoubtedly that city life very much lowers a woman's potential vitality. That where a woman, a strong, natural, healthy woman, lives in the country under placid conditions, with good food, fresh air and every natural assistance to her vitality, she can safely have a very much larger family than a woman living, even well-fed, under the unnatural stimulus of city life, and the bad air and conditions which tend to drown her vitality.

3. That is an argument for giving the person in the city proper conditions and environment and housing, etc.?—

Undoubtedly, but at the same time it must not be forgotten that those women whom you mention from Canada are women who have practically nothing in the way of intellectual life—that they are little better than the uneducated peasant class.

4. The mother of a distinguished Canadian, a most charming lady, managed to have fifteen children, and one of them rather complained of the smallness of the family and the fewness of his brothers and sisters, rather than boasted about its largeness?—Did the mother do anything in the way of intellectual work, or was she simply a mother? I am not defending modern life at all—I deplore it; I think we are utterly on the wrong track. But there are a great many claims on a woman's vitality in modern city life, which she has not had until the last generation or so.

5. You say now, "I will pander to these"?—No. I look on the present generation and the next generation as unfortunate links between a wretched past and a golden future, and it is essential for us to make a strong generation to tide over the next following generation to the glorious future; and therefore, as so large a percentage of women are now living under conditions which undermine their vitality, and make it impossible for them to produce fine and healthy children, it is really bad for the race to allow these women to bear more children than their vitality is adequate to.

6. You are going to have a very good quality, but very little of it. At the present moment we have a declining birth-rate, but you would make it decline still more until the death-rate was more than the birth-rate?—The part of the birth-rate which I would encourage to decline is the part that leads to useless, intolerable waste; the part which leads at present to endless coffins of children under two years; the part which leads to feeble-mindedness; the part which leads to the agonising torture of the mother. All those births ought to be blotted out, so that the woman gets a rest in between healthy births. The only births I would suggest stopping are those which lead to nothing but misery, ill-health and moral and mental and physical deterioration.

7. Is not one of the results of our modern civilisation the fact that there is less child-bearing, even although no means are used to prevent it?—You mean fertility is reduced?

8. Yes.—I think there is no evidence of that. My ideal is that every child born should be wished for, should be healthy, should be beautiful, and should live to grow up. If you cut down the birth-rate until you get only those born who have such expectations, then the survival rate will be

so great that you will compensate for more than those you cut out.

9. Supposing you had what it is the duty of the State to do—to see that the mother, during the whole of the time that her child is first within her, until that child is born, is properly safeguarded and looked after, and the child and mother afterwards properly looked after, and the mother not obliged to go to work, but the father earning enough so that the mother can stop at home, do you see any objection? —I see objection to child-bearing at any time or under any conditions, *unless the mother desires that child at that particular date.*

10. Will you go so far as to say that all those who were great and good in the world were born under such circumstances?—No, but if the cost of the great and good to the world is to be the horror and slavery of the mother in bearing it while she does not wish to bear it, the cost is too great.

11. Do you think it is a healthy sign in a woman that she should have those ideas while she is carrying her child?—I think it is a result of our evolving further and further away from animal conditions, and more and more into spiritual conditions. It is only the mother who has the right to decide at which moment she shall have her child.

12. Is it not an imperfect union if you exclude absolutely the idea of child-bearing?—I do not think so, because I think the act of union, like so many other things in this world, is complex. I never said it was an imperfect union if they were only thinking of child-bearing. I think a union could be quite a perfect one if it took place solely with the desire to bear a child. What I maintain is that there are essential and profound results of a chemical, mental, spiritual, and truly religious nature which come from a union which is entirely apart from child-bearing.

13. Colonel Bond. In regard to the question of the prevalence of abortion, are you aware of, or have you any statistics as to that prevalence before the war amongst different classes?—I do not think accurate statistics can be obtained on that subject, because a very large amount of abortion takes place quite secretly, even by the woman herself doing the most dreadful things with knitting-needles and crochet-hooks and that kind of thing. It is terrible to come across cases in which a woman has almost killed herself; such cases would never have been heard of if it had not been for the loss of the needle inside. I do not know of any statistics that are possible, but in America, where the know-

ledge of " birth control " is so largely suppressed, and consequently abortion is more used, I have heard of streets in which there are abortionists who have nightly queues of poor women waiting for operations for abortion to take place.

14. Is there, apart from your own personal idea, any real evidence as to deleterious effect of total abstinence on health, any evidence to show that the large number of women who are unmarried and lead continent lives enjoy worse health than married women?—There are lots of incidental pieces of evidence, such as the prevalence of insanity. Statistics show that the proportion of insanity is higher among women who have never had sex union, but it is very difficult to get evidence, because a number of women who appear to be leading unmarried lives may have had one or more lovers in their lives which they have concealed. There is the evidence of the many cases that have passed through my own hands, and which make one feel strongly the deleterious effect not only outside marriage, but inside marriage. But abstinence within marriage is in many respects more difficult and harmful than to those outside marriage.

15. We must recognise that the question of the " safe " period depends physiologically on the time at which ovulation takes place. Is it to be supposed that it differs in women of different temperaments; is it not seasonal?—That question is not yet cleared up. Marshall in his *Physiology of Reproduction* gives a very good account of ovulation, but a certain amount of evidence comes from women, and there are distinct personal characteristics concerning the times of ovulation. The average woman has a twenty-eight-day rhythm, but at which date within that ovulation takes place is uncertain. The old idea that menstruation and ovulation coincide is wrong. Their source is the same, but the travelling of the ovum to its ultimate freedom takes place differently. Some women have made observations, and it appears that sometimes three, four, five, or up to ten days after the cessation of the flow ovulation takes place, so that perhaps some women have two or three " safe " days in each twenty-eight, while others have ten or twelve, and some no " safe " day at all. Evidence on that point is very much wanted.

16. You mention as to the beneficial effect of the male secretion on the woman's health; I think that is your view—that it has a beneficial effect?—Yes, undoubtedly.

17. I should like to know what evidence you have that it is beneficial. Is it merely your idea, or is it founded on

definite physiological evidence?—It is difficult to do any research upon that point, because it is so interlocked with so many other things, but indirect points regarding it are scattered through medical literature, and there are other facts which lead to a kind of general inference that it must be so. Proof in a strictly scientific sense has not been made, and I do not know how it could be, but I think every medical man must know from his own experience the general benefits of the marriage union to a certain type of anæmic girl, for instance.

18. Dr. Amand Routh. I cannot quite understand how birth control in any way can be considered to be religious. When you say "religious" are you speaking of Biblical commands or otherwise?—I had not thought of a definition of religion, but surely a religion must be the conscious relation of the soul to the divine. And as the procreation of children entails the launching of a soul on eternity, as all the Churches maintain, the control or otherwise of such creative launching must be a religious concern.

19. Does God wish to limit children?—No, but God is working in and through us for the increasing beauty and perfection of human life, and therefore anything which leads to sin and misery must be working against God. As we are now very much further evolved away from primitive conditions than we were when the Christian Bible was written, that does not make any of the new needs which arise within us irreligious.

20. Do you think that the Deity prefers small families to large ones?—I think God must prefer small families, because if every one had big families, there would not be standing room upon this earth.

21. Do you think God could not arrange the limitation of the population without bringing us down to what I consider a very unphysiological act on the part of men and women?—If every large family reproduced large families, there would not be standing room.

22. There is such a thing as emigration?—Not off this planet.

23. You want your method to be universally known?—Universally to every married pair.

24. The Chairman. You would say that a childless marriage would be better than having a single child that was not the outcome of love between the parents?—Yes.

25. Dr. Amand Routh. How far do you want this birth control to go?—I want to eliminate every child born weaker than it need be, born unhealthy, born of a rebellious mother,

born to any inherited disease, born to a doomed coffin. It would free the community from supporting the unfit, and the middle class could then produce more children of good quality and support them.

26. THE CHAIRMAN. Does not that rather affect the control of marriage than the control of birth?—No; births can take place outside marriage, and in it the two people might need the joy and comfort of each other's society and yet not be fit to bear children.

27. DR. AMAND ROUTH. Don't you think the large majority of depraved mothers are due to many other causes—syphilis, bad housing, early training for children, etc.?—I know many cases where syphilitic mothers, or a mother who knew her husband was syphilitic, have been to doctors and asked about birth-control methods, because they knew they ought not to have another child, and they have been refused the information by the medical profession.

28. DR. STEVENSON. Have you formulated any conception of the fall in the birth-rate that you think would be desirable, or how far you think the line you suggest would mean a reduction in the birth-rate?—It is not any alteration in the numbers of births, but in the incidence of the birth-rate that I wish to see. In our social community at present, things have reached such a pass, that a large proportion of the birth-rate is in the wrong place.

29. THE CHAIRMAN. You want a decrease in the births among the poor, and an increase among the wealthy?—Yes.

30. Therefore you mean that there is more love in the marriage of the wealthy than of the poor, against which I protest?—No; the poor write and tell me the most pathetic stories about the destruction of love by having too many children; of the mother's health giving way because she cannot manage all the children, and of the conditions in a dirty slum where there is no place for the children to play. The love would be increased if there were only a small number of children, such as the parents could deal with. Often in middle-class families the number of children is affected by the incidence of taxation. It is a re-arrangement of the birth-rate I am advocating, rather than a fall in it.

31. MRS. CLAY. In regard to the question of the safety of the inter-menstrual period, what data do you go on in condemning that?—I account for it through the fundamental differences in women which correspond to the three types in men. Among the more intellectual women—women of our own class—I know many where for twenty or thirty

years the observance of that period has been successful, but I have not in my knowledge a complete instance of the potentially fertile woman, healthy, strongly vital, unintellectual, working- or middle-class woman in which the "safe" period is perfectly safe. In many cases it misleads. The fertility of the sperm distinctly varies not only in different men, but at different periods in the same man. A vital, healthy sperm can live for eight days, and consequently can impregnate after the supposed "safe" period has passed.

32. Miss Michelmore. How do you propose to control the birth-rate among mental defectives?—In the case of real feeble-mindedness, I think sterilisation is the only proper cure, or to keep them shut up in an institution; but the latter is very cruel, because very often they are not sufficiently feeble-minded to be unsafe at large; they can even make a living for themselves, but they ought to be prevented from any possibility of reproduction by sterilisation.

33. Who is to be the judge?—There are several methods of sterilisation, and there is a perfectly legitimate and safe method.

34. Is it a fact that the sickness rate among married women is higher than among single women?—I think it very likely, and if so it is very largely due to the rapid recurrence of pregnancy. A woman once wrote to me that she had had eight cases of miscarriage and a deliberate abortion in three or four years. Women in the working class sometimes have abortions every two months or so, and that lays them open to sicknesses that are to be directly traced to thwarted and excessive pregnancy.

35. Dr. Sullivan. Is not lactation sometimes prolonged because it is believed to be a safe period?—There is quite a tradition to that effect among working-class women, who often keep a child nursing far too long for that reason, and that injures them.

36. Dr. Reid. Would there not be a difference between a married woman with forced abstinence and a single woman?—It is much more difficult and harmful for a loving pair, living in loving contact, to practise abstinence. A strongly sexed unmarried woman or man may suffer, too, at intervals, but in marriage there is continuous stimulus on the part of each party.

37. From the point of view of unnatural and natural control, natural being periodic, can you see any moral difference between the one and the other?—I think the Church is entirely illogical in its attitude. All the methods

recommended by the Churches are essentially immoral, because none of them are natural.

38. DR. SCHOFIELD. Did you not lead us to believe that it was the welfare of the future generation that was the first consideration?—From the point of view of the Birth-rate Commission, yes.

39. You would say that the principal object of your paper is to ensure a better class of children being born?—One of the main objects.

40. You would consider that equivalent to ensuring the future welfare of the country?—Yes.

41. You use the phrase, "the best children that can be produced"; what is a "best child" in your mind?—A child is a very complex thing, and it has what we roughly describe as physical, mental and spiritual qualities.

42. Can you produce a "best child" by any means?—The best child, in my mind, is a child who has a strong, beautiful body which will enable its brain and its spiritual outlook most completely to touch the rest of humanity.

43. Do you trace a relationship between the birth of the child and the conditions of the conception?—That is a point about which it is very difficult to get statistics or data. All through medical literature, particularly early in last century, there was a great deal of indirect evidence that the condition of mind at conception is very important, and there are actual statistics from Switzerland that the condition of the body of the mother at conception is of great importance, such as the prevalence of feeble-minded and unsatisfactory children following times when the parents were having intoxication bouts.

44. It was not conception that made them better; it was environment?—It was conception plus environment. There is to be considered the condition of the mother during the whole of the nine ante-natal months.

45. You would not say that the condition at conception is the principal factor in producing what you call the best child which can be produced?—Only the first condition, but according to the date of the conception so you have the date of the other nine months. As the starting-point, it is the first and most vital. In our class the children of the last twenty-five years are mentally and physically superior to those of the poorer and more thriftless of the working classes. In our class also the mothers are generally deliberately conscious that they want to have their children, and most of the births in our class are wanted.

Eighteenth Day

Monday, March 24, 1919

The Bishop of Birmingham in the Chair

Statement of Sir Rider Haggard, K.B.E.

Rural Housing is one of our greatest social problems. In some counties and districts there are sufficient houses for the shrunken population; in others this is not so, while, speaking generally, in all the majority of the cottages are scarcely such as to offer the comforts and conveniences, and sometimes not even the decencies, which men and women with families desire and expect. In certain places, indeed, no dwellings are to be found—a state of affairs which results in the restriction of marriage and in its sons and daughters being driven from the land. Moreover, these evils have been increased by nearly five years of war conditions, during which building and even repairs have become impossible. Further, the cost of cottage-building is, and for a long time must remain, quite double what it used to be. I do not suppose that I should be far wrong if I put the price of the erection of a substantial cottage to-day at about £500. Can such dwellings be provided in quantity without enormous loss to some one? Obviously the owner of the soil cannot be expected to erect them, since even if he were able to find the money—which in the vast majority of cases he cannot do—he would be much out of pocket over the transaction. It comes to this, then, that either they will not be built, or the State must undertake the burden and face the loss, which will undoubtedly be large. Of course if labourers' wages are to be permanently higher, they could afford to pay more for their cottages, though if the price of food also remains much higher than it used to be, the extra sum that they can produce towards this item of household expenditure will not be very large. Therefore it would seem that if the needful cottages are to be provided, this must be done by means of State or private gift, or of subsidy from the rates, and to a considerable extent. Small-holdings, if they could be established in great numbers and made really profitable, would to some extent palliate the housing question, since often the owners would erect their own dwellings by the help of building societies. I am of opinion, however, that under our present conditions it would be

unwise to expect too much from small-holdings. In past ages these flourished, or did not flourish, but rather furnished some kind of livelihood to a number of people, because no other way of earning their bread was open to them. It should be remembered that by nature the Englishman is an adventurer, not an agriculturist, in which he differs from the Highlander, the Welshman and the Irishman, for the reason that the Celts are land-lovers. As soon as the Englishman found the opportunity, he began to desert the soil and to return to his ancestral occupation of adventure, whether in trade or otherwise, and this tendency is, I believe, as strong as ever in his blood. Further, co-operation is a necessary precedent to the success of small-holdings on a national scale, and hitherto the Englishman on the land has refused to co-operate to any considerable extent. The life of a small-holder in England is one of the hardest that I know. He must work early and late if he is to succeed, not infrequently in our uncertain climate for a smaller return, if he depends on the land alone, than is earned by the day-labourer. I can recollect no instance where what I call artificial small-holdings—that is, small-holdings subsidised in one way or another from outside sources—have proved a success. Successful small-holders, like poets, are born and not made. In certain districts, however, where the soil is suitable, where markets are near and the small-holding instinct prevails from father to son, the results are good. The Isle of Axeholme occurs to me as an example. Where these advantages are lacking small-holdings do not, as a rule, flourish in England unless their owners or tenants also work at other occupations, such as carting, wood-felling, etc. This is a great pity, especially as my experience is that small-holders are generally the parents of large and healthy families, who, as a rule, remain upon the land. Thus at Downham, in Cambridgeshire, I found that the families averaged eight children. For these reasons I do not believe that soldiers will settle upon English land in the great numbers which some people seem to expect, or that, if they do, they will remain there permanently. From an answer given in the House of Commons on March 10, I see that on the Holbeach Soldier Colony the rents for five-acre holdings of land, suitable for market-gardening and fruit-growing, work out at £5 10*s*. the acre, inclusive of houses and buildings, which is a considerable sum when it is remembered that the small-holder must compete with the large farmer who hires similar land in the neighbourhood at about 31*s*. the acre. I know that there are many who look upon

Protection in some form or other as the fairy wand, the waving of which will bring about agricultural prosperity. My own view is that laws which permanently raise the price of the necessaries of life among a people the vast majority of whom live in cities, are not practicable in these islands, and less so than ever now, when that population has come to understand what dear food means. The same ends, however, might be obtained by the granting of substantial bread subsidy, or by the guaranteeing of high minimum prices for produce which comes to much the same thing. In short, by treating home agriculture as it is proposed to treat the matter of housing—as so necessary to the nation that its economic aspects may be ignored. For my part, although I am not wise enough to suggest a solution of these difficulties, I most certainly trust that those in authority will be able to find one, because as much as any man in England I am convinced of the necessity of preserving, and indeed of increasing, the population on the land, which is really the nursery of our race. There the healthy men and women are born and reared who in the end the cities devour. No country can remain great for long if, say, seventy or eighty per cent. of its inhabitants live in great and ever-growing cities. Therefore it should be the first duty of true statesmanship to solve the riddles upon which I have touched, especially as children of the right sort will in the future only be born in numbers where the housing conditions are sanitary and desirable, and where the parents are prosperous.

I turn now to the subject of the Dominions and their population. There we find enormous areas of almost manless land only awaiting cultivation to put out more foodstuffs and raw material than the world needs at present. Thus Australia alone could, I believe, support a population of at least fifty millions and still be a large exporter of human necessaries. In short, we are holding about a quarter of the earth with a white population of under sixty million people, less than that of Germany alone, and of that sixty millions over forty millions inhabit these little islands, a mere speck of land compared to the great area that remains. Greater London alone, I believe, has more people in it than Australia, New Zealand and the southern part of Africa put together, omitting the black inhabitants in the last instance, and rather more than all Canada. Moreover, unmeasured stretches of this vast inheritance have every advantage that we can boast at home, with good climates, which we cannot boast, thrown in. They have coal, iron, harbours, ample lands of richest fertility, almost free of rates, taxes and tithes.

Here in Europe men battle and die in thousands over little strips of Mother Earth; there great territories lie unoccupied, crying to be tilled. Moreover, everywhere, east and west and north and south, flies one flag, beneath whose shadow men from all of them for one cause have marched to battle and to death, because they are of one blood. Further, they have one tongue, acknowledge one God, and seek justice under one law.

Things being thus, it seems a pity that so many at home should be opposed to emigration, or redistribution of Empire population in any form, though this would determine our difficulties, or most of them, and add enormously to our strength, while of those who do emigrate, a large proportion, chiefly through lack of guidance and knowledge, become the citizens of other countries. Were it otherwise, the British Empire might grow to something more wonderful, and a greater power for good, than perhaps the world has ever known. Moreover, within its own bounds it could produce all, or nearly all, that man needs, each part sending to the other whatever might be desired.

Such a picture may appear to partake of the nature of a Vision Splendid, but given statesmanship and the exercise of a little common sense to-day, its realisation is well within our grasp. Could this come about, I believe that incidentally most of the problems into which your Commission sits to inquire would find their solution through the working of natural laws, and this without the violation of those of political economy.

1. THE CHAIRMAN. You have given a great deal of study to rural questions, especially the housing question, for years? —Yes.

2. You admit that rural housing is a great social difficulty? —Yes.

3. And it is one reason why we cannot get labour, and cannot get families, almost?—As regards labour, yes, in some districts; as regards families, I am not so certain. I think that the question of families is more connected with land-owning than with housing. Some of the largest families I have known have come out of very poor houses.

4. Have you gone into the question of rural housing rather near to London and other great cities, and do you find that sometimes quite small cottages have been made into week-end residences?—Yes; that is notorious.

5. Why does the owner of the land not provide these rural houses?—It is purely a financial question. During my life it has always been practically impossible for any

owner of land to build a house in the ordinary agricultural village which will return any adequate interest.

6. Is that because of the lowness of the wages paid?—Yes, I think it is more or less. But also it has become a habit, even if the tenant could pay, that he should have his house at a very low rent. We never hear of the rent of agricultural cottages being treated economically.

7. Is that a good thing for a man's sense of self-respect? Would it not be better that he should be paid well and then feel that he had to provide his house?—Personally I think so, but at the present cost of building I do not know exactly what rent would be an economic rent. I observed, I think at some of the new docks, the Government have been putting up cottages which cost them £900 each. I cannot tell you about the accommodation, except that I have seen criticisms of the cottages, saying that the walls were cracking, and so on. I have no doubt that there was enormous waste in this instance, but it shows to what price cottage-building is rising. I think £500 would be about what a decent cottage would cost. The interest on £500 is £30 a year at five per cent. (you could not keep it in going repair under five per cent.) and you will not get £30 a year out of the agricultural labourer.

8. That argument is intensified in regard to private houses in urban districts because the site value is so much greater?—I do not see how the thing is going to be done myself. We are told there are a million houses wanted, and even at an average of £500, their building would mean £500,000,000, which would cripple the country. If you see half per cent. on a house costing £500 I think you would be fortunate.

9. Is the plan dying out for the person employing to provide house accommodation for the person who works?—No; I think it is still often practised. When I farmed I used to provide several houses; it is rather a custom.

10. Are those houses suitable from the point of view of sanitation?—Some are and some are not. The best of the cottages I had was a large double cottage converted, with nearly an acre of garden; I think altogether it cost me more than £100 to convert and do up. I let that at 2*s.* 6*d.* a week—but I did not even get the 2*s.* 6*d.*; the man never paid it.

11. Supposing you were a farmer bound to make your living out of your farm and surroundings, it would pay you to be sure of people to work your farm?—Yes, and that is the line farmers have gone upon. They often give a

cottage; it is thrown in as part of the work, but when it comes to a house costing £500 I do not know what will happen.

12. Do you consider that one of the solutions will be smaller ownerships?—I do in a way, because where people own land they have in the past shown a considerable tendency to provide their own cottages. My own belief is that the old cottages in small places in England were provided by small owners of land who by hook or by crook put up their own dwellings. At Winterslow, in Dorsetshire, when I was there, I found that the people who held land under the peculiar tenure which had been devised, were putting up their own houses, and uncommonly good ones too. They borrowed the money from building societies and erected the houses. That was the effect of ownership: having the ownership they felt sufficiently interested to build on the land with a view to permanent settlement. I think, however, that it would be easy to be too optimistic about small holdings. It is no good taking a small holding if you cannot make a living out of it, and to put a man on to heavy land and expect him to make a living is to expect what will not happen. There are certain areas in England, like the Cambridgeshire Fens and places of that character, which are suitable to small-holdings; where land can be worked with a one-horse plough, and in most weathers, and where markets are near. The average of our English land, however, is scarcely suited to small-holdings, and bitter disappointment will ensue if the country, at great expense, puts thousands of men on unsuitable land and expects them to live.

13. That is rather an English difficulty; even in Ireland you find them successful?—I think Ireland is much more suited to small-holdings. To begin with, the Irish will co-operate.

14. Is not the secret of success of small-holdings very often co-operation between different small-holders in order to carry out, one for the other, certain necessary work at certain seasons of the year?—Certainly. In England, I think, you cannot have successful small-holdings without adequate co-operation.

15. Would you consider anything in this country could be successful without co-operation?—Co-operation is a main reason of the success of the Danish small-holdings.

16. People who have once got to our Colonies never want to come back permanently?—That tells its own tale; they know when they are well off.

17. You speak in your paper about reducing the burdens

on English land; in what directions?—I mean that the rates are dreadfully heavy to bear; the Poor Rate and other rates are going up continually, Also there is the upkeep of the roads, which really is a national matter, but is thrown upon the localities. Then education is a national matter, for often a man is educated and then moves away from the district which has borne the expense of his upbringing. And there is the tithe, which has risen greatly.

18. What about what we call landlordism; would you abolish that? Would you give compulsory powers to acquire land for small-holdings, etc.?—I suppose compulsory powers in the present state of affairs have become more or less a necessity, provided they are exercised with absolute impartiality and justice, not used as a method of oppression or of spoliation.

19. Your solution would be to get more and more the adventurers out of the country to other places?—I am not in favour of putting pressure on anybody to emigrate, but if people are going to emigrate I think it is the duty of this country to see that they go somewhere where the British flag flies, whereas in the past a very large proportion have gone to the States and elsewhere, and therefore are lost to the Empire. It is perfectly obvious that a man moving across the seas is not a loss to the Empire, but becomes a strength to the Empire if he goes to our own Dominions, as we have found in the present war. We own all the best of the world, with the exception of the United States. We own Canada, Australasia, Africa—or the best portions of it—and other lands. If all that country could be adequately populated, and remain on its present terms of loyal affection with the Motherland, it becomes obvious that our Empire would be not only greater than that of Rome—it would be also the greatest force for good that the world has ever known. If people want to emigrate, and they will—there will be enormous emigration within three years—let them be conducted to our own territories. After the Boer War in 1903 there were in a single year 250,000 emigrations, and of those 123,000 went outside of the Empire, mostly to the United States of America.

20. Is it not a question how many and what quality these Dominions beyond the seas will take?—I made the journey two years ago as the honorary representative of the Royal Colonial Institute, to examine into all these questions of the after-war settlement and employment of ex-service men. I found they were very anxious for our people, but they were not anxious for wasters.

21. Are we anxious to send away our better quality?—No; I do not think so. If they want to stop here let them do so, if they can get a living, but if they want to go, get them under the shadow of our own flag and not of a foreign flag.

22. Is not the present difficulty that it is people who, without being bad people, are people without very much energy who might be prepared to go to Canada or Australia, but that they do not want them there?—What they want are sound and wholesome people.

23. Of particularly one sex?—No, they want men and women together: they do not want the woman without the man, except in the case of domestic servants. They are very keen upon the domestic servant class. They want fine, healthy young women between eighteen and thirty, who will work, but they do not want women over thirty-five.

24. Don't you think the attraction at the present time of our Dominions beyond the seas is sufficiently great to lead people to go there?—Yes, but I do not know how it is, they don't always go. I suppose America has a great power of self-advertisement, and an enormous number of those who leave here go to the States.

25. Dr. Saleeby. A much declining proportion?—It has been going down a bit, but there is still an enormous number, and we do not know what will happen in the future.

26. According to Dr. Arthur Keith it is the Scotch and Irish who have emigrated most in the past—an extraordinary proportion of Scotch and Irish in our Dominions, a much greater ratio than is the case in the British Isles?—I think the Irish very largely go to the States.

27. But in Canada and Australia the proportion of Irish is much greater than in the British Isles?—Yes.

28. Our Empire is relatively empty?—Yes, relatively.

29. Only fifteen million outside of these shores, and these empty places are seeking for population?—There is a socialistic section of thought in these countries, especially in Australia, which would like to keep out everybody, because they have the idea that if you let any one else in it divides up whatever they have got. It is a false idea of economics.

30. You state the ratio of the sexes is reversed in the Dominions?—Yes, there are more men, but not as many more as you would think.

31. You are aware that in the judgment of the Dominions Royal Commission, or rather of Dr. Snow, in giving evidence before it, we have, as it were, no men of the reproductive

ages to spare from these islands?—I do not think there are many to spare.

32. And any more who go would increase the proportion of women here, which is a menace to monogamy?—If they go alone.

33. You do not encourage men going alone?—Not as a rule; I prefer that a man should go married, or engaged.

34. You state that the Dominions do not want women, and then you say not over thirty-five—they want healthy young women?—Yes, and of a certain class. They do not want too many educated women.

35. Healthy young women who are willing to work with their hands?—Yes, and especially domestic servants.

36. The conditions are hard for such?—No, I do not think they are when they get there. They are uncommonly well paid. They can easily get out of it if they do not like it. A good domestic servant is a pearl beyond price in those places.

37. You would welcome the steps taken to promote the emigration of girls under the most scrupulous protection?—It depends upon how they are looked after. I have known so many evils follow the promiscuous emigration of girls.

38. You would have a Government emigration committee which devoted itself to trying to restore the balance of the sexes at home and in the Dominions to natural proportions?—Yes, something of that sort. We found on the Dominions Royal Commission that there was not such an enormous balance even here of marriageable women. It is the old women of whom there are so many.

39. It is they who accumulate?—They live a very long while, much longer than we men do.

40. Have you any data as to the average birth-rate of a man according to whether he stays at home or goes to the Dominions? Generally he produces more children out there?—That is an enormous question, and I cannot answer it at the moment without reference to statistics. They keep going into it in the Dominions. It depends on the Dominion, and upon the housing question. I do not know whether they produce more, certainly not if they have to live in the cities, but they would if they lived on the land.

41. The tendency is to go to the cities?—It is the women who go to the cities for the most part, and the men follow them. That is one of the evils of Australian life, that so many of the women live in the towns while the men work in the country, and that leads to all sorts of difficulties.

That is very largely due to the housing question. But it is not only the lack of houses: it is dislike of the country, of being lonely, and the desire for amusements.

42. Is it not a fact that the English after three generations cease to reproduce in sub-tropical regions?—Not in the south of Australia; you are thinking of the northern territories.

43. In the birth-rate of Australia it is shown that they generally after the third generation become sterile?—You must remember that in Australia the whole matter is so complicated by the city trouble. They have only a population of under five millions in that gigantic country, which could support fifty millions or perhaps one hundred millions, and of these more than one-half live in three or four great cities. Already in places like Sydney you are getting slums like you have in London, and this notwithstanding all the empty wealth of space that lies around the cities in Australia.

44. DR. SCHARLIEB. Would you not agree that in our Colonies, like Canada, there is room for any number of couples with families?—I do not want to rob this country, but if they want to go there is room.

45. COLONEL BOND. Is it a fact that the lack of facilities by which the rural population and labourers can get milk for their children is as much a difficulty for them as in large cities?—More so, I should think. A great deal of the milk which is produced in England is sent straight away to the towns.

46. What is your outlook of the future of the country on the point of rearing a healthy race to recuperate our town-dwellers?—That raises the whole question of "back-to-the-land." If you can infuse into our rural population a spirit of co-operation; if you can then enable them to have land not too heavily burdened, and land of the right nature; if you can carefully select those who are likely to make good use of that land—and it is no use merely to select a man who wants to go on the land: you must select a woman also, or otherwise there is unhappiness and they split up—if you can establish the small-holding instinct among the people, you may do a great deal. But to say it is as easy as the gentlemen who write articles in the evening papers estimate, is wrong. It is not easy. A while ago the Salvation Army established small-holdings at Boxted, near Chelmsford, and I remember saying at the opening that if the Salvation Army, with its great business capacity, could not make a success of these small-holdings, then I gave up the idea of artificial small-holdings in England ever succeed-

ing. They had £100,000 capital to work with, and what was the end? In five or six years they had to give them up: they failed. Having the capital, having the pick of enormous numbers of men, from whom they only selected the most likely ones, they failed, and I think the Government have now taken over the place. The settlers quarrelled; they would not co-operate, and there was any amount of trouble. It was a most disheartening disappointment. I do not think, however, that the land was especially suitable. It was ordinary, rather heavy Essex land, but the houses were good.

47. DR. ROUTH. You would say about what Dr. Millard calls "saturated" nations, that the emigration of both sexes is the best way to limit that?—More or less.

48. Dr. Millard says the need of the Colonies is colonists from the whole of Europe, and that birth control is the proper remedy, and greatly preferable to emigration?—There are two ways of looking at it: one is from the general point of view of morality, and the other is from the point of view of national advantage. We should be a great deal more comfortable here with ten million people than with forty million, but if more trouble arose in the world, such as that which we have just experienced, where would a ten-million nation be? Without our help where would France have been in the war against Germany's sixty millions? In Germany's bag, I think. And then there is a place called "the East," and already once or twice in the history of the world it has poured out its hordes and eaten up the population of the West. If we are going to reduce the population here to a standard at which no doubt it would live in great comfort, what would happen if that swamping flood came on again? It is only the strong who can resist the strong. Otherwise I would like to say that a resurrection of mediæval England with three million inhabitants would no doubt be a great deal more comfortable than we are to-day.

49. Your idea is that if the poorer classes who multiply too rapidly emigrated, and had their children in other climes more suited to them than our cities, they would be able to bring up a much better type?—The children born in our Colonies have the advantage of enormously improved environment, better air, plenty of food, etc.

50. You especially advise in regard to housing that electrification should be adopted everywhere?—Yes, if you can find the money to do it.

51. And you think it is feasible not only for railways, but for lighting, etc.?—It seems to me that considering the

wonderful things which are being done, I do not see why you should not produce electricity to an unlimited extent.

52. You recommend bath-houses?—Yes. I would have in every village, in a central place, a sort of communal bath-house, and a closet where clothes could be dried. I think it would be very economical, especially if you had electric power; and I would combine it with a public kitchen.

53. Do you think any housing scheme should be adopted unless there was a proper system of drainage?—I think in most of our villages the less "drainage" you have the better, and the healthier the people are. There is nothing more dangerous than inefficient drainage—where you have a great straggling village and not sufficient water to clear the sewers.

54. You would be content with cesspools?—Some proper system of collection or earth closets. I know a village where they spent an enormous sum of money to put down sewers, and there is no water to wash them out.

55. LADY SELBORNE. Is there any reason why a perfectly healthy population should not be reared in a garden city?—No. I think your garden cities are much more likely to be popular than small-holdings. I mean garden cities with allotments attached. It requires a man of great ability and energy to rise from a small-holding.

56. To choose men for small-holdings without much knowledge of their capacity hardly ever succeeds?—I have not known it succeed. I have investigated twenty-six counties of rural England, and I have scarcely found an instance, except perhaps Winterslow, which I described in *Rural England*.

57. A good deal of the reproach attached to County Councils for not going faster is due to the fact that they found it is not worth putting the men on to small-holdings?—In Norfolk we have some most successful small-holdings, but in that county there is a good deal of land which is admirably adapted to small-holdings. Also the small-holders have been very carefully chosen from among local men.

58. MISS MICHELMORE. Even the women over thirty-five might be useful in the case of small-holdings?—Yes, until they got rheumatism or wearied of the work.

In the last Local Government Board circular it was suggested the question should be left to Public Utility Societies and limited to a penny rate?—Some one has to pay; you and I would have to find the surplus.

59. Would you suggest that large cities with over a certain number of inhabitants should be prohibited from building

further, and that sites for cities should be established in certain parts of England for, say, thirty thousand inhabitants?—I think it would be very excellent if you could prohibit the further extension of large cities, but I fail to see by what machinery you could do so. The only way I have known it done is by some landlord refusing to sell more land to build on. I am all for the garden city idea if it can be carried out, but it involves enormous capital.

60. DR. MARIE STOPES. You speak of housing as only yielding half per cent. Do you not think that that is due to the insistence of so many local authorities on certain types of brick houses? Would not the solution be to allow the erection of wooden houses, or houses of more simple construction?—Wood is so expensive that it would cost as much as anything else, but I think there is some future for reinforced concrete houses. Labour and materials are so dear that whatever you do you will find building enormously expensive. By the time you have paid for your land and sunk a well and put fencing round, etc., I believe you would find you could not come out under £500 a cottage at present prices.

Statement of DR. C. KILLICK MILLARD, M.D., D.Sc.

The question of the birth-rate is intimately bound up with that of birth control, or the voluntary regulation of the size of the family. It is to this aspect of the subject that I shall chiefly confine my remarks. Hitherto but little serious attention has been given to the study of birth control, one of the chief contributions to the subject being the Report of the original Birth-rate Commission, issued in 1916. The practice of birth control has unfortunately been declared by the highest ecclesiastical authorities to be "grossly immoral." The Report on Marriage Problems presented to, and endorsed by, the Pan-Anglican Conference at Lambeth in 1908—the most weighty official pronouncement of the State Church of this country—was emphatic as to the moral iniquity of "seeking to regulate at will the results of marriage," or of "deliberately avoiding or preventing childbearing"; and the conference passed special resolutions condemning the practice. This being so, it is not surprising that the subject has been tabooed, and the scientific study of it seriously prejudiced. I venture to suggest that this ecclesiastical condemnation was largely due to misunderstanding. The fact that, in the Report referred to, methods of preventing conception were coupled with the use of aborti-

facients, is some evidence of this. I may say that from private information I have received I believe that many of the younger clergy dissent from the bishops on this question. Recently, by special invitation, I gave an address on birth control to the clergy of the Leicester Rural Deanery, and an interesting discussion followed. It seems to me very desirable in the interests of human progress that the obstacle created by the stigma referred to should be removed, unless it can be shown that it is really justified. For this reason I heartily welcome the work of this Commission. Free ventilation is sure to dissipate prejudice, and makes it easier to discuss a question on its merits. The question of birth control has become of special importance at the present day, owing to the political state of many countries of the world arising out of the Great War. According to all accounts, the social conditions of the people in many parts of Europe are almost too terrible for words. Starvation is staring them in the face, they are without proper clothing or other necessaries of life, and all ordinary remedial and palliative agencies are completely disorganised. Now, what is likely to be the fate of children born under such conditions, or of the unhappy mothers who bear them? It seems to me that the rigid practice of birth control is not only desirable under the conditions referred to, but is absolutely necessary if acute maternal suffering and terrible infant mortality are to be avoided. I should suggest that the birth-rate in those countries where civilisation has, for the time being, broken down, should, as far as possible, be temporarily suspended, until happier and more settled and prosperous times arrive.

Hitherto it seems to have been taken for granted in most countries, *e. g.* Germany, France, Great Britain, etc., that increase of population was supremely desirable, and that a stationary population would be disastrous. No doubt this sentiment—which has become so deeply engrained as to be almost instinctive—is really based on militarist considerations, and in the past, when such considerations were vital, it may have been a wise and proper thing to have encouraged it. The fact remains that there has been an international competition in populations, just as there was in armaments. But now, with the whole international situation fundamentally altered, and with a League of Nations about to be formed, whose special duty it will be to safeguard the countries with small populations, we should surely revise our attitude towards this question. If the League of Nations is to be a reality and not a sham, this competition in birth-rates and

population must cease. It might be a good thing if the population of some countries were actually reduced by the beneficient operation of birth control. There may be other countries besides those mentioned which, if not actually over-populated, are at least "saturated" with population, *i.e.* any further increase of population will not tend to increase either the happiness or prosperity of the people of those countries, nor be of any advantage to neighbouring countries. Indeed, it seems highly probable that in certain countries, with strictly limited territories, an increase of population beyond a certain point will constitute a distinct menace to the peace of the other countries. This view is certainly gaining ground. Thus, the Bishop of Hull, speaking in the Lower House of Convocation at York in July of last year, said: "If we are to have a League of Nations, the Church must reconsider her attitude of blessing large families and saying 'Be fruitful and multiply.'" Apart from any other consideration, however, I wish to suggest that in most countries, at any given time, there is a certain optimum population which the resources of that country will best support. When that point has been reached, it is not in the interests of the people of that country that population should increase further. No doubt by improvement in agriculture a larger population might be supported, but such an increase in population would largely neutralise the advantages which would otherwise accrue from the improved methods. As regards our own country, the question is complicated by the fact that she is the Mother Country of an Empire. Many people would admit that the population of this country is great enough were it not that they wish to see our Colonies filled up with an all-British population. This sentiment is, no doubt, very patriotic, but I think we ought to remember that Britain's great Colonies—New Zealand, Australia, South Africa and Canada—are practically the only undeveloped territories of any extent still available for settlement by Europeans, and therefore Britain, as a member of the League of Nations, ought to look upon her Colonies as the natural outlet for surplus population from other European countries. If we take this view we need not be in any hurry to see our Colonies filled up. I suggest that this is the higher, post-war patriotism. Nor need we blame those who do not regard it as their duty to have more children than they want merely in order to emigrate them to the Antipodes.

The Coal Supply

The question of population is also complicated in this and many other countries by the question of the coal supply. Obviously this country could not support anything like its present population but for our rich deposits of coal. It is no exaggeration to say that as a nation we live on our coal, because it is a vital necessity in the production of our manufactured goods which we export in exchange for food. When the coal is worked out, our occupation and means of livelihood will be gone. As an agricultural community this country would be grossly over-populated. The progressive increase in our consumption of coal is astounding. At the beginning of last century the annual output was ten million tons; at the middle of the century it was seventy millions. It went up by leaps and bounds until, at the end of the century, it was two hundred millions, and during the first fourteen years of the present century it increased to two hundred and sixty-three millions. Much of the increase was, of course, due to the industrial developments, but much was also due to increase of population. At the pre-war rate of consumption every additional million of inhabitants involves the consumption of an additional five or six million tons of coal per annum. Now it is only a question of time before our coal-fields begin to show signs of exhaustion, and this time, according to the reports of successive Coal Commissions, is not so far distant as many people imagine. We are living on our capital, and we are using up that capital in a spendthrift fashion, at an ever-increasing rate, as if it were inexhaustible. Not a single ton of coal consumed is being replaced, and when the supply begins to give out the cost will increase, and will go on increasing, and we shall no longer be able to manufacture cheaply. We shall not have the wherewithal to import unlimited food supplies, as at present, and the question of over-population will then become acute. I suggest that in the interests of posterity we should call a halt in the rapid rate of increase of population which has been taking place in this and other European countries. Certainly we can view with equanimity—even with thankfulness—the fall in the human birth-rate.

I propose to give my evidence under four heads—

1. Birth control and the individual.
2. The public health or sociological aspect.
3. The medical or physiological aspect.
4. The eugenic aspect.

1. *Birth Control and the Individual.*—I speak as one who has been happily married for close on twenty years, and is the father of two boys and two girls, all normal and healthy, and properly "spaced" in the matter of age. (Ages are eighteen, sixteen, fourteen, and twelve.) With this record I feel I can view with complacency the diatribes of celibate ecclesiastics who think it their duty to denounce what they are pleased to refer to as "race suicide." I regard it as the sacred and inherent right of every married couple to decide for themselves to what extent they shall become parents. The responsibility for this solemn privilege is theirs, just as the responsibility for the care and upbringing of the children born is theirs. Moreover, the undertaking of this great responsibility—the greatest that any human being can undertake—ought not to be left to chance and haphazard. Mankind should arise above the level of the lower animals in such a vital matter as procreation. Every child born should be desired by both parents, and especially by the mother, on whom the burden chiefly falls. To me it is horrible that so many children are born into homes where they are not wanted, where there is no room for them, and whose coming is dreaded, and looked upon as a misfortune. At the same time I fully appreciate the joy and happiness which children, provided they are not too numerous, will bring to their parents. I think there should be sound teaching on this subject. It is sad to think that whilst some people's lives are spoilt by having too many children, other lives are spoilt (whether those concerned realise it or not) by having none or too few.

There is no doubt that, to the individual, the possibility of being able to control the size of the family is a very great advantage. Certainly, it is hailed by many as a boon and a blessing which robs marriage of one of its greatest terrors. Very few people amongst the thinking classes really desire to have an unduly large family; and the fact is patent that amongst these classes—doctors, clergy, teachers, etc., indeed among all the professions—large families have well-nigh become a thing of the past. In my opinion it is quite futile to attempt to restore the mid-Victorian middle-class family of eight or nine children, even if it were really desirable to do so.

2. *The Public Health or Sociological Aspect.*—As a Medical Officer of Health of twenty years' standing, I have necessarily been brought into close contact with most of the principal social problems of the day as they exist amongst the poor in a large industrial town. I have been much

impressed with the hardship involved by over-maternity amongst the poor, and by the fact that the evils of poverty, under-feeding, over-crowding, and infant mortality are all greatly intensified by the reckless breeding which usually obtains in the slums. I quite recognise, of course, that birth control would not be—any more than temperance in the matter of alcohol—a panacea for all social evils, but it would be one link, and a highly important one, in the chain that is to uplift the lowest classes. Without this link—*i. e.* if the lowest classes must always propagate as rapidly as they do at present—I fear the prospect is not very hopeful. Probably, however, if they could once be raised to a higher standard of life, they could be trusted to practise birth control without much further resistance, just as the classes above them do at present. In October 1917 I chose the subject of birth control for an address I was called upon to give as President of the Leicester Literary and Philosophical Society, a body representative of the intellectual life of the town. My views being thus made publicly known, many people have since spoken to me on the subject. In this way I have discovered how great is the volume of opinion amongst thinking people, in all ranks of society, in favour of birth control.

As an illustration of over-crowding due to large families, I may instance a working-class home in Leicester where a father and mother and fifteen children are all living together under the same roof. Two other sons are in the Army. The father came to see me recently with a view to my helping him to get a son out of the Army, and I had an interesting talk with him on his experiences and struggle for existence. As an illustration of the effect of large families upon infant mortality, I may mention another case of a mother who came to see me, also quite recently, about getting her son, suffering from tuberculosis, into our sanatorium. She mentioned that he was the only survivor of eight children; one had been born dead, the others had all died in infancy.

The following case, now under my care so far as the baby is concerned, illustrates the evil of too rapidly succeeding pregnancies :—

Mrs. S., 88, Blank Street, Leicester, comes to consult M. O. H. about her baby, eleven weeks old. Gives the following history: She married twelve years ago at age of twenty and is now thirty-two. During this time she has borne ten children, never more than one at a birth. The second baby came when the first was only eleven months old, and she has had a confinement almost every year since. Has more than once become pregnant whilst still suckling the last baby. Before the war her husband used to allow her twenty shillings per week. Since the war she has found it necessary to go out to work. Was at work in the factory (heel building) till 6.30 p.m. on the Thursday,

and her present baby was born on the Sunday following at 2.0 p.m. She thinks that perhaps this is why it is so weakly, but she has had much trouble with many of her children. Three of the ten died in infancy; one has fits; another has consumption and has been in the Infirmary and also in the Sanatorium; the last baby before the present one is now fifteen months old but shows no signs of walking yet. Mrs. S. herself has bad health; she suffers from "nerves" and from bad pains in her head. The children worry her. The last two did not follow one another quite so rapidly, owing, she says, to her husband being away "soldiering." He is now back and she is very much afraid that she is "beginning again." Wishes very much that she knew how to prevent it happening so often. Thinks that two children are enough for any woman to look after properly.

It may be thought that it is not want of knowledge, but sheer recklessness that causes the poor to have such large families. No doubt recklessness is an important factor, but recklessness is largely fostered by hopelessness. They are the victims of a vicious circle. Teach them not to have such large families, and so help them to attain a higher standard of life, and they will not be so reckless.

I may observe that one great advantage of recognised birth control clinics would be that by their means the practice of birth control would, to some extent, be brought under supervision, and some check be thereby placed on its abuse. Where women came asking for advice, and there was no sufficient reason for their wanting to prevent conception, *e. g.* if they had no children, or only one, the advisability of further children would be urged. It would be pointed out to them that the one child might die, and that in after years they might bitterly regret having no children, and be willing thus, when too late, to give anything to have a child. Most women, I think, would respond to kind and sympathetic advice of this kind. At these birth control clinics I would have the walls adorned with good pictures, illustrating the beauty of maternity, and leaflets would be distributed emphasising the same idea, and intending to raise the ideals of parenthood amongst the poor. Most will agree, I think, that it is in the interest of the race, as well as of the individual, that parenthood, and especially motherhood, should be a matter of joy and happiness, voluntarily entered upon, and not something to be feared and dreaded. Too often, as things are at present, the fact of becoming pregnant is regarded by the woman herself, as well as by her husband, as a misfortune or even a disaster, whilst friends and neighbours commiserate and pity instead of congratulating her. Too often fertility, instead of being regarded as the blessing it should be, is looked upon almost as a curse. I wish to submit that if science has provided

us with non-injurious and effective means—even though with our present knowledge they may not be perfect—whereby the serious evil of too frequent pregnancies and excessive child-bearing may be advanced, or at least minimised, then this is something for which poor, suffering humanity should be profoundly thankful.

3. *The Medical or Physiological Standpoint.*—Having now shown why I consider birth control to be desirable, it remains for me to say a few words about " methods." As a medical man I have for some years been interested in this aspect of the subject, and I have discussed it with medical friends. I have been struck with the absence of satisfactory knowledge as to the relative merits of the various methods commonly employed. It would seem that serious scientific research is needed before the medical profession can speak authoritatively on the subject. A few individual medical men of a past generation, in this and other countries, have inveighed very strongly against birth control methods, all of which they have insisted are highly injurious to health. From the tone of their writings, however, and their obvious exaggeration, it is quite apparent that they shared the strange obsession against birth control which certain people still seem to have. Those who have read Beale's *Racial Decay* will understand what I mean. It is unfortunate that the Bishops, in the Lambeth Report referred to above, accepted these biassed opinions of isolated medical men at their face value, and as though they represented the considered opinion of the medical profession. There was, however, this excuse for them—that few medical men hitherto have had the courage to speak in favour of birth control, although undoubtedly many practise it. With a view to ascertaining what the prevailing opinion of the medical profession really is at the present day, I recently issued a questionnaire to one hundred medical practitioners, including medical women, the names being selected more or less at random. I received eighty replies. These I analysed, and gave particulars of in a lecture on Birth Control which I delivered last year, by invitation, before the Royal Institute of Public Health. The lecture was published in the *Journal of State Medicine* for November 1918, and pages 334–336 contain the results of my inquiry, to which I beg to refer the Commission.

The answers received to this inquiry indicate that a majority of doctors do not regard certain specified methods of birth control as injurious to health. This is important, because the Bishops, in the Lambeth Report, were particular

to fortify their case against birth control, or, at least, against what they referred to as "artificial" methods, by adducing medical evidence to show that these were very dangerous to physical health. Now if it can be established that certain "artificial" methods, or, as I would prefer to call them, "scientific" methods, are not injurious to health so long as they are properly used, then we have a good reason for asking the Bishops to reconsider their attitude towards the whole question. There is no doubt that in the ten years since they issued the Lambeth Report many of them have already profoundly modified their attitude towards the principle of birth control, as is to be seen in a private memorandum (unsigned) issued for the guidance of the clergy (published in the Report of the original Birth-Rate Commission), and in which they entirely withdraw their condemnation of birth control, so long as it be accomplished by one particular method, which they describe as "natural," and not by "artificial" methods, which they still regard as "sinful." I live in hopes, in view of the change in public opinion which is taking place, and the more enlightened attitude towards sex questions in general which now obtains, that at the next Pan-Anglican Conference the 1908 Lambeth Report may be reconsidered. Before leaving this aspect of the subject, I wish to say quite frankly that I regard birth control without "artificials," or "scientific" methods, as quite impracticable for the great mass of mankind.

4. *The Eugenic Aspect.*—From the eugenic point of view the present position is most unsatisfactory. Birth control is practised by what we may call the A1 classes and neglected by the C3 classes. The result is, that in spite of the high infant mortality which accompanies the reckless breeding of the latter, they are adding to the population faster than the former. Owing to this, the net result of the operation of birth control at present is dysgenic. We all regret this, but whilst some blame the A1 classes, whom they accuse of not doing their duty, and urge that they should follow the example of the C3 classes, I would suggest that it is the C3 classes who are to blame for exceeding their duty, and it is they who should follow the example of the A1 classes. Moreover, if birth control were selective, as it ought to be, so as to operate specially in those families where some hereditary taint existed—tubercular, epileptic, feeble-minded, syphilitic—it would be a most valuable eugenic instrument. In this connection I beg to submit a leaflet which is handed, in a sealed envelope, to every married tuberculosis patient who leaves the Leicester Sanatorium—

"PRIVATE AND CONFIDENTIAL.

"*Consumption and Parenthood.*—Married persons suffering from consumption should think seriously before having children or adding to the number of those they may already have. There is no doubt whatever that a tendency to this disease is frequently transmitted from parent to offspring. This is true where only one parent is affected, but the risk is naturally much greater if both parents suffer from the disease. Unfortunately it is also true that men suffering from consumption, even in an advanced stage, are quite capable of procreating children; and similarly consumptive women may readily conceive, often with disastrous consequences to themselves. Moreover, persons who have been once attacked by this disease, even though they think themselves cured, should bear in mind that it frequently returns. With health broken down, what prospect is there of being able properly to support or bring up a family? Therefore, both for the sake of the community, and for their own sakes, persons who are affected with consumption are earnestly advised not to beget offspring. Persons suffering from consumption and desiring further and more particular information on the subject of this leaflet should consult their medical adviser, or may apply to the undersigned.

C. K. MILLARD, M.D., D.Sc.,
Medical Officer of Health,
Town Hall,
Leicester.

("Always remember that when once conception has occurred no interference of any kind is permissible, either by taking drugs or otherwise. It is then too late, and such action is not only a criminal offence, but dangerous.)"

In conclusion, I think it is evident that the practice of birth control has come to stay. Its advantages to the individual are so obvious that it seems probable that it will continue to increase, and ultimately it may reach all classes. In any case, if we cannot abolish it, it is surely wisest to make the best rather than the worst of it, as is at present the case.

1. DR. SCHOFIELD. Are we to take the general drift of your paper as being in favour of a great reduction in the birth-rate?—I think we should look upon the fall in the birth-rate as a good thing and not a bad thing.

2. You are in favour of a considerable reduction?—In certain classes, yes.

3. You say: "Every child born should be desired by both parents, and especially by the mother. Certainly its coming ought not to be dreaded or regarded as a disaster. What kind of race did we expect to obtain where such conditions of birth existed?" What is your own answer to that question?—I wanted to imply that you will not get the best quality where the children are not wanted.

4. You say the quality of the child depends on conditions of conception?—Yes.

5. Have you any statistics or warrant for that opinion?—I am afraid I cannot give you statistics. I give it as an opinion; I am not saying that it is a matter that one can prove. I was not thinking merely of the moment of conception, or the effect on the child from the point of view of heredity, but more especially of environment.

6. Dr. Marie Stopes. You draw a line between before and after conception has started?—No one recommends tampering with a woman after conception. Once a woman thinks that she has become pregnant she must be taught that it is then too late, and she must make up her mind that she wants the child. I would not allow anything to be done once a woman has reason to believe that she has become enceinte, but that will not be for some time after the act; it may be two or three months.

7. Is it your experience that in "C3" population abortion is at the present time very prevalent?—There is no doubt about that.

8. Have you any statistics?—As one of my duties I have to be supervisor of midwives, and I find out from them that many women do try to "get out of trouble" when pregnant, and they have sometimes referred to certain women who are supposed to be doing a good trade in that direction.

9. Are not criminal abortions, induced abortions, extremely prevalent among the "C3" population?—We have no official knowledge of them, and can only gather knowledge of them in the way I have suggested. In the case I have referred to in my paper a crochet-hook was used, and had to be removed, and the hospital authorities felt it their duty to prosecute.

10. Why?—I do not know.

11. Do you think the treatment of a patient in that way is legal—the betrayal of the confidence of a patient by a hospital?—That was a unique case, and probably the prosecution would do much more harm than good, as it would advertise the use of the crochet-hook. The hospital authorities informed the police.

12. Is this Commission prepared to suppress crochet-hooks?—You never will suppress this thing by the method of occasional prosecutions; the temptation is too great, and the thing is too easily done, and the risk of proceedings is too small. The best way, it seems to me, is to let women have the information which their betters have. You cannot say it is unnatural on the part of a woman to wish not to have more children if she feels she has more than she can deal with.

13. Miss Michelmore. Would you suggest that every girl before marriage should have proper instruction, not necessarily from her mother?—I think the question of sex instruction wants a great deal of consideration. There is not enough sex instruction given by mothers. Many women when they marry are absolutely in ignorance of the very rudiments of married sex life, and recently when four husbands happened to be talking together at the end of a lecture it transpired that in three instances their wives were quite ignorant of the nature of the sex act prior to being married. A girl ought not to be launched into the world without knowing something about sex and the danger of venereal disease.

14. Lady Selborne. Have you followed the figures of the German birth-rate in the last two years?—They have fallen enormously.

15. They are now considerably below the death-rate?—They were falling before the war.

16. Is it not the case that some countries are far more suitable for people to live in, and others for things to grow in?—Quite so, but I should never want to see Canada as thickly populated as Lancashire, for instance.

17. Mrs. Clay. About the period at which a woman is not to put an end to any product of conception, you mention two or three months; supposing she is not quite certain, having run the risk, that she is going to have a child, do you think she ought to be allowed to take any means to prevent it?—If she thinks she has already conceived, she must not do anything. I would not object to douching within a few hours of the act, because that is done with a view to preventing conception. There should never be any doubt in a woman's mind as to whether she is doing it to prevent or to "cure."

18. Does any one know exactly when the sexual act becomes life?—It is generally believed to be in the course of a few hours, but it may be delayed possibly for twelve hours. Where a woman resorts to any violence, somersault, or anything else, she wants to procure abortion.

19. The Chairman. Anything that was done to prevent conception, you would consider morally, as well as in other ways, correct, but anything done after the slightest possibility or expectation of conception, you would not so consider?—That is exactly my position.

20. Dr. Amand Routh. You recommend birth control for a good many things. How do you suggest in an ignorant population, from a physiological point of view like that of

Russia, that this method should be adopted?—I admit the practical difficulty, but I suggested it in order to combat the moral objection, which latter, I think, is largely based on the idea that birth control is contrary to the interests of the nation.

21. In your paper you say that it is going to be one of the functions of the League of Nations to safeguard nations with small populations?—I mean that in future nations need not be afraid of having small populations; they will look to the League of Nations to protect them; they will not need to say they must increase their population to protect themselves against their enemies. I suggest that the League of Nations will rather tend to discourage countries increasing their populations beyond what their territories will support.

22. You speak of "saturated" nations. "Saturated" is a good term. You heard what Sir Rider Haggard recommended in regard to emigration; have you any remarks on that?—He rather endorsed my feeling that emigration was not very satisfactory. You would only emigrate your best—the people you wanted to keep at home. From the point of view of parents, it is not satisfactory to send their children to Australia and probably never see them again.

23. What do you think would happen if Australia was heavily populated with Germans? Do you recommend that our Colonies should be populated with other Europeans to the exclusion of our own people?—No, not to their exclusion. It is suggested that we cannot fill them up, and I say never mind, looking at it from a point of view of the League of Nations.

24. Rev. J. Marchant. You think that our Colonies might be used for the surplus population of Europe?—Yes. I am not suggesting that you should admit Asiatics into our Colonies. That raises another question.

25. Dr. Amand Routh. Your fifth reason is to reduce over-maternity in the poorer classes. Can you give us any suggestion as to how you would limit them? Is it to be a national thing?—All over the country now ante-natal clinics are being established. At these places a woman doctor is employed to give advice to expectant mothers, and there is generally a nurse in attendance as well. If once the moral stigma were removed, and public opinion sanctioned it, there would not be any difficulty in arranging for birth control advice to be given by these doctors. If the doctor thought it reasonable that a woman should not have any more babies, she would tell her how other women managed. We want

more authoritative opinion as to what is the best method. The present position is most unsatisfactory. No one wants to give advice and be accused of giving immoral advice. This thing amongst the present generation has a tremendous hold. There may be too many people, perhaps, who put off having more than one or two children, and those people want to be warned that they may put it off too long. I think most people want from two to four children.

26. Is not the tendency to put it off for two or three years until married couples get a little more money and get settled down?—They do not, I think, before the woman has one child. I should doubt whether there are a great many who deliberately avoid having any children. We should show them it is a pity to resort to birth control until they have had at least one or two children.

27. Don't you think that if a woman had tried to prevent having a child and had then had one she would be still more anxious to get rid of it?—I think a wise doctor would give sympathetic advice, and they would see the foolishness and danger of it.

28. As regards eugenic reasons—the mentally affected, the tuberculous, etc., you advise that a doctor should be consulted in order to decide whether births should be controlled or not?—I think it should be part of the propaganda that where there was any taint there should be no children.

29. Who is to decide whether it is a case that should be stopped for eugenic reasons? Do you advise that the lady doctor at the clinic should give the advice?—Yes, if you can get people to go and consult the doctor on this matter, but until doctors are entitled to give the advice you would only get one-sided advice, or the doctor would shake his head.

30. Colonel Bond. Would not your position be that you think it reasonable to take the life of the male sperm, but not of the fertilised ovum?—Yes, for the natural fate of the sperm is to die.

31. Dr. Saleeby. Do you consider that birth control is the proper term? Would it not be better to call it "contraception"?—I did not invent the term. I have no objection to "prevention of conception," but "birth control" includes a little more than that.

32. You do not go so far as to admit the propriety of the endowment of childbirth?—I think we want to do more for the mothers, but I could not encourage reckless breeding. I would not give a bonus on breeding, but in the middle class education expenses should undoubtedly come out of income tax assessment.

33. Where are you Malthusians going to stop?—My special concern now is to bring birth control to the lowest section of the community, which at present is not practising it. The falling birth-rate is largely the result of birth control coming downwards in society; at present the only class which is not practising it is the lowest and least desirable class.

34. Do you aim at a stationary or a declining population? —In this country I should say that a stationary population is what we should aim at. Other countries need it even more than we do.

35. Miss Michelmore. In speaking about other nations going into our Colonies, had you in your mind the idea that if the Germans and other European nations had an outlet, they would be less likely to break out in warfare?—If a country feels it must have more territory, and has not got it, it must fight; that was one of the causes of the war. I think it would be very unpatriotic from the point of view of the League of Nations to say in regard to our Colonies that other countries "need not apply."

Nineteenth Day

Monday April 28, 1919

The Bishop of Birmingham in the Chair

Statement of Dr. Amand Routh, M.D., B.S.

Physiology of Lactation.—The function of lactation is the secretion of milk in the glands of the breasts for the continued nourishment of the child. Each breast contains about twenty lobes radiating from the nipple, and each lobe is divided into lobules, containing gland-cells lined by epithelium and nourished by blood vessels. The secretion from these cells is received into ducts which open into larger ducts, and eventually find their exit at the nipple. The changes which take place in the breast during pregnancy are gradual and free from pain, but after the birth of the child, and in a minor degree after the earlier expulsion or death of the fœtus, a more active phase occurs and some local discomfort ensues. These functional changes are of bio-chemical origin, due to unknown products derived from the uterine or fœtal metabolism getting into the blood, and preparing the cells of the mammary glands to secrete milk. In the earlier months of pregnancy the glands secrete a clear,

watery fluid, but towards the end of pregnancy, and for the first few days after labour, a creamy fluid is secreted, the result of fat globules being formed in leucocytes and in cell epithelium. This is called colostrum, and acts as a slight purgative to the child after birth. On the third or fourth day after labour the glands in the breasts become very active, and the breasts become swollen and tender, showing that true milk is being secreted. It is a physiological process, and should be unaccompanied by feverishness. The milk consists of a watery solution of proteins (casein and albumen), sugar (lactose), salts of lime, soda, potassium and magnesia, with fat globules suspended in it. These ingredients vary much in different women, and at different times, according to the diet, exercise and mental attitude of the mother. If the mother is poorly fed, the milk suffers, though not as much as one would expect, for the tissues of the mother are drawn upon in a remarkable manner to enable the cells of the breast to secrete normal milk. Mental emotion, such as anger, shock or hysteria, has more effect on the secretion of milk, both as regards its quantity and quality, than the physical condition of the mother. Neurotic and emotional women are not good nursing mothers. A placid, happy disposition, fresh air, bowel regularity and moderate exercise, encourage lactation.

Lactation a Natural Law.—Lactation is a natural law to every mammal. Every woman, married or unmarried, should nurse her child, unless she is herself suffering from tuberculosis, recently acquired or untreated syphilis, insanity, severe anæmia after hæmorrhage, puerperal fever, or from some breast or nipple complications or unless, from certain disabling defects or immaturity, the child is unable to suck. Apart from such conditions as these, every woman, with rare exceptions, can feed her child, and eighty per cent. of women, with due knowledge and good intent, can supply their children from birth. The mammary gland is immediately stimulated to secrete milk by the sucking of the child. The human breasts are adapted for twins, but in the ordinary cases the breasts should be used alternately. It is now agreed that the feeding of the child every three hours, and omitting night feeding, gives better results than the old habit of feeding every two hours, day and night.

Advantages of Lactation.—Lactation encourages normal involution of the womb and of other tissues involved in the processes of pregnancy and labour. Lactation, especially if the mother is a happy, contented woman, able to rest, and not burdened with undue household cares, has

an enormous educational influence on the child. The child looks to the mother for what it needs most, and, having obtained it, quietly sleeps till another time of need arises. This close mutual attachment has an important influence in fashioning the early mental and moral development of the child. Virtues, such as obedience, reverence, patience, endurance and punctuality can be gradually inculcated by a wise and sympathetic nursing mother during a six months' lactation, and the future character of a child may thus be unconsciously created.

WEANING.—Lactation should be continued for at least six months, unless the mother or child are losing weight or vitality. Indications for gradual weaning are, in the child, the appearance, at about the seventh month, of the lower central incisor teeth, especially if the upper incisors also are being cut; and, in the mother, if menstruation reappears, as ovulation may then be assumed to be recurring. Weaning, apart from the above considerations, should be established before the ninth month, so that pregnancy and lactation would occupy a year and a half, and even if conception should take place in the next two or three months, nearly two years would elapse between the birth of children, which may be assumed to be Nature's "spacing."

ETHICS.—Women who (*a*) for inadequate reasons refuse to suckle their offspring, and those (*b*) who prolong lactation to one or even two years to prevent another conception, are equally culpable. The suppression of the normal function of lactation, without due medical reason, especially by such methods as strong purgatives and other drugs, by bandaging the breasts, and by separation of the child from its mother, unquestionably hinders uterine involution, lessens the mutual attachment of mother and child, makes the child's earlier months liable to digestive disturbances (which lead to so much infant mortality) and usually prevents a child getting the most appropriate diet, both for tissue formation and for functional development. On the other hand, the continuance of lactation beyond nine months, or after menstruation has reappeared, involves a gradual deterioration of the quality of the mother's milk, with consequent impaired vitality in the child, and anæmia and lassitude in the mother. Often, too, the mother suffers from depression, which may pass into the melancholic type of the insanity of hyperlactation. It must be noted too that prolonged lactation does not necessarily prevent conception, for women may become pregnant whilst suckling, sometimes

even without intervening menstruation. In such cases the double drain upon the woman of lactation and pregnancy is obviously injurious to herself and to both of the children for whom she is simultaneously providing nourishment. I happen to know two delicate ladies who were the only children of their mother, who suckled her first-born till the second child, born eighteen months after the first, was three months old, when there was not enough milk for the two children. If the woman's object in avoiding lactation is a selfish one, *e. g.* to give herself the opportunity of being away from her child for long periods of time, or to preserve her figure, she will almost always show further evidence of her selfishness by artificially avoiding another conception at the early date, which absence of lactation would otherwise render probable. Women who suckle their children rarely employ contraceptives. Women in the upper and middle classes who refuse to suckle almost invariably employ some variety of conception control.

CONCLUSIONS.—1. Almost without exception all mothers can nurse their babies. Cases of total failure of milk supply are exceedingly rare.

2. The best way to encourage lactation is to stimulate milk secretion by putting the child to the breast at the intervals already indicated.

3. Doctors, midwives and health visitors should do everything possible to educate mothers as regards the advantages of lactation to themselves and their offspring and the disadvantages arising from suppression of that function and the substitution of hand-feeding.

1. THE CHAIRMAN. We want clear evidence of your statement that practically every woman is able to suckle her child.—There are some women who conscientiously believe they have no good milk. Because they " did not have any last time," or because their " mothers did not have any milk," they do not try, but even if the child is not allowed to suck for the first three or four days, or even till the end of the first week, you could secure lactation even then. You get it gradually developed.

2. Do you think that the average women of the educated class have any knowledge on the subject at all?—Both they and their poorer sisters are beginning to have, because they are being educated on these lines. There are so many more Maternity Homes and Rescue Homes for married and unmarried mothers, and there they rarely have a non-suckling mother. If one woman happens to have too little milk, then another woman takes her child on too.

3. But I am speaking of the average woman of the higher class. Suppose she suckled her child for the first couple of days and nothing happened, wouldn't she think there was nothing? I am trying to point out that the educated woman is more ignorant on this than anybody else.—It is either ignorance or selfishness. Civilisation does not explain the absence of milk any more than it does in the case of animals.

4. Dr. Reid. Is it not the fact that the midwife has been responsible for misleading most people on this matter? —That may have something to do with it. In France it was proposed some few years ago to make it punishable for a woman to refuse to suckle her child where there was no medical necessity to prevent her.

5. Miss Michelmore. Is not the fact of a child every three years a strong argument in favour of the endowment of motherhood?—It is hard to say. It has been discussed whether, where there are a large number of factories in a certain district, it could not be arranged to have a common crèche to which the mother could go to feed her child.

6. The small employer is the difficulty, and you could not do that with the small employer?—No.

7. Sir Rider Haggard. In view of the difference between artificial and natural feeding, can you tell us how far, given absolute care and intelligence and instruction, we can take up the line that the artificially fed cannot do as well as the mammal fed?—It is only necessary to say that a mother's milk is always warm, and is always aseptic.

8. So can be the artificial.—A working woman has no means of sterilising the milk; the intelligent lady does not often do it. It is left to an underling of some sort. We saw the result most markedly in that strike in 1911, in which many towns like Liverpool were entirely out of milk for their children, and the mortality from dyspepsia and diarrhœa troubles went up to four or five times the normal amount for several weeks. The mother's milk varies in detail in a remarkable way from week to week, according to what the child needs. Even where the child is not entirely fed by the mother, it gets on very much better if it has a little milk from the mother with other milk. It prevents dyspepsia, for instance, in a remarkable way. There is an advantageous variation in the composition of natural milk according to the age of the child.

9. And the perfectly natural food that we see advertised? —Children brought up on some artificial foods may be lovely to look at, but they have not the stamina of other children.

10. Dr. Stopes. The mother may have a flow of milk,

but in many cases it would only be a fluid called milk, which might lack essential ingredients.—It is a simple fact that a woman, although looking poor and badly nourished, does not produce inferior milk. They suffer for that; their tissues are called on to supply and make it approximately normal. Where a mother is going downhill it is better that other milk should be supplied to the child.

11. I have heard of cases where the attending doctor has said that the child is being starved because the milk is not of the right quality.—The essential amount of fat and proteins in mothers' milk varies very little.

12. I am speaking of well-intentioned mothers of our own class who wish to feed their children, but the attending doctors and nurses say that the child is being starved.—I think you will often find that the child is being overfed. It takes too much milk and cannot digest it. If a child gets the proper quantity it is quite all right. It has been worked out in Paris and been found that the child usually had too much, which did it more harm than good.

13. THE CHAIRMAN. Continually in my parochial experience in London, in a parish where there were a considerable number of well-to-do, as well as poor, and it was quite a common thing for some one to say, "Such-and-such is quite prepared to feed her child, but the doctor says the milk was not good enough."—I have not heard of that as a frequent thing. It would mean, perhaps, that the doctor did not know how to examine the milk.

14. DR. STOPES. Now as to the point of birth control and lactation. Might I ask for your data?—The vast majority of suckling women do not become pregnant until after a few months.

15. There are many exceptions, I think?—Not many, I think. As a rule they go on for several months. My experience is that lactation postpones conception very much—certainly for six months.

16. In Japan I used constantly to see women nursing not only children in arms, but children up to five years old. Your opinion would be that that would be very bad?—I should say it would be bad for all concerned. The mother might then have three or four babes suckling all at one time.

17. SIR RIDER HAGGARD. There is no comparison between the artificial food and the mothers'?—Certainly, mothers' milk is superior.

18. When I was in Denmark I went over those great dairies, and they told me that the sterilised milk, which I

have seen given to infants here, was a most deadly thing, and I wanted to ask your opinion. They have a system of cooling the milk with ice, but they told me it was most deadly—that it would go bad without your knowing it, and when it was given to a child without knowing it it was about the worst poison there could be.—I believe it is accepted that the sterilisation of milk, whether by boiling or electricity, or whatever means, does harm to the milk from the point of view of nourishment, but it has not been found out why, probably by destructive action on vitamines.

19. It will become bad without becoming offensive to the taste. What does actually suffer this deterioration?—I believe it does not undergo lactic acid fermentation like ordinary milk, but it is more liable to separate organisms getting at it afterwards.

20. Is it not a point that should be cleared up for the public?—Dr. Hope of Liverpool has worked at it a good deal as regards the electric sterilisation of milk, but I have seen nothing published on the subject, except that unless milk is electrically sterilised in bulk its cost is excessive.

21. Do you think the matter has been sufficiently investigated yet?—We know that it is not so good for a child, and if it is left about it gets more easily contaminated than other milk does.

22. THE CHAIRMAN. Are we not recommended to avoid drinking milk that has not been boiled?—You are supposed to drink it at once. In time of epidemics it should be boiled at once and kept covered up.

Statement of DR. W. C. SULLIVAN, Medical Adviser to the Liquor Control Board

It is desirable to make quite clear at the outset that this evidence is concerned solely with the effects of alcoholism, that is to say, of alcoholic excess, and that the remarks which I propose to submit have, therefore, no reference to the moderate use of alcoholic beverages. So far as I am aware, there is no evidence of scientific value to suggest that such moderate use has any effect, good or bad, on the health and vitality of succeeding generations. In dealing with the influence of parental alcoholism on the offspring, it will be convenient to distinguish two ways in which that influence may be exerted: In the first place, there is what may be described as the way of direct biological action, whether on the germ-cells of either parent prior to conception, or on the developing embryo during pregnancy, when the mother is

of alcoholic habits, or again—a more problematic mode of influence—on the suckling infant through the alcohol excreted in the milk of the mother or wet nurse. And, in the second place, there is the indirectly injurious action of parental alcoholism on the health and vitality of the children through the deterioration of the environment, which is the ordinary result of parental intemperance. As there are obvious difficulties in assessing the part which alcohol plays in this latter way, and in differentiating its influence from that of other social and economic conditions of a detrimental sort, I will confine myself, in dealing with this point, to a single illustrative instance, namely, the suffocation of infants by drunken mothers. This result of parental intemperance is definite and measurable, and it can be correlated readily with other alcoholic phenomena. Turning first to the question of the effect of alcoholism on the germ-cells, there are three categories of evidence to be considered, viz. (1) Clinical observations regarding the frequency of alcoholism in the parents of individuals presenting various forms of bodily and mental defect, or regarding the frequency of such defects in the children of the alcoholic; (2) experimental observation made by breeding from alcoholised animals; and (3) pathological observations of lesions in the genital glands in chronic alcoholism in the human subject and in animals which have been experimentally alcoholised. The evidence of the first category has been so frequently and so fully discussed in the literature both of alcoholism and of degeneracy that it would be superfluous to go over it again. I summarised its more important points in a work on alcoholism, published some years ago, and I may further refer persons interested in the matter to Dr. Tredgold's excellent treatise on *Mental Deficiency*. In general terms the position with regard to this evidence is, that the large majority of clinical observers hold that the admittedly frequent association of parental alcoholism with degeneracy of offspring is to be explained as a relation of cause and effect—that the poisoning of the germ tissue of the parent has brought about the defective development of the offspring. Those who dissent from this view do not, for the most part, dispute the evidence, but they maintain that it should be otherwise interpreted; they assert that alcoholism is always the result and expression of a degenerative taint in the stock, and that the observed condition of defect in the offspring of alcoholic parents is merely a further development of this taint. This position they occasionally fortify by the further assertion that if parental intoxication affected that growth and vitality

of the offspring, it would be an instance of the transmission of an acquired character, belief in which is, or was till recently, a biological heresy. Though both these assertions are certainly fallacious, they have perhaps served a useful purpose in directing attention to other sources of information, and particularly in stimulating research by the method of animal experiment. The most important work in this line has been done by Stockard. He has found in a series of experiments, in which alcohol was administered to guinea pigs by inhalation, that the offspring of the alcoholised animals, in comparison with the young of control animals of the same stock, were conspicuously inferior in strength and vitality, and in many cases presented gross abnormalities of organisation. These bad effects were transmitted through several generations, and were, indeed, more pronounced in the later generations than in the immediate offspring of the alcoholised subjects. Since the publication of Stockard's work, other observers have carried out experiments on similar lines, some of them obtaining confirmatory, and others negative, results.[1] Further research is clearly desirable, in view of the importance of the question, but we may, at all events, conclude provisionally that the results of animal experiment are in agreement with clinical experience in showing that parental alcoholism does exercise an unfavourable influence on the germ-cells, expressed in defect and deviation of development in the offspring. In this connection it must be borne in mind that the negative results found in some breeding experiments with alcoholised animals—paralleled, of course, in clinical experience regarding the children of alcoholised parents—furnish no ground for questioning the positive results obtained in other experiments which satisfy the necessary conditions of scientific research. The negative results merely show what is, indeed, generally admitted—that the germ plasm is not very easily damaged, and that

[1] Stockard: The Influence of Alcohol and other Anæsthetics on Embryonic Development (*Amer. Jour. Anat.*, 1910, Vol. X. p. 369).

An Experimental Study of Racial Degeneration in Mammals Treated with Alcohol (*Archiv. Int. Med.*, 1912, Vol. X.).

The Artificial Production of Eye Abnormalities in the Chick Embryo (*Anat. Record*, 1914, Vol. VIII. p. 33).

The Hereditary Transmission of Degeneracy and Deformities by the Descendants of Alcoholised Mammals (*Int. Med. Jour.*, Vol. XXIII., June 1916).

Stockard and Papanicolaou: A Further Analysis of the Hereditary Transmission of Degeneracy and Deformities by the Descendants of Alcoholised Mammals (*Amer. Naturalist*, Parts 1 and 2, Vol. L., February and March 1916, p. 65).

it requires a tolerably intense degree of parental alcoholism to affect the growth and vitality of offspring. And this consideration also disposes of the common objection that if alcohol were really an important agent in racial degeneracy, the living descendants of the hard drinkers of the eighteenth century should all be mental defectives. This might be a valid argument against the theory that the moderate drinking of alcoholic beverages damages the stock, but it is not relevant to the view which attributes such an influence only to marked degrees of parental intoxication; for whole communities do not suffer from chronic alcoholism. The third category of evidence—that derived from pathological observation—may be more shortly dealt with. The systematic examination of the genital glands in alcoholic subjects has shown that lesions of these glands are amongst the most frequent and marked changes resulting from chronic intoxication. Morbid alterations of similar type have also been found in rabbits experimentally alcoholised. These facts indirectly support the view that parental alcoholism injuriously affects the stock. In the foregoing remarks we have been considering only chronic intoxication. It has also been maintained, on the basis of clinical observation, that drunkenness at the moment of conception may be a cause of gross defect—that the child so conceived is likely to be an idiot or an imbecile. This theory hardly admits of proof or disproof. With regard to the other modes of direct biological action—that is to say, the effect of maternal intemperance during pregnancy and lactation—there is no need to say much. It is not disputed that alcohol can pass through the placenta, and that excessive drinking by a pregnant woman may lead to abortion or still-birth, or to conditions of defective vitality in the child. It may be noted, however, that most of the clinical evidence on this point was collected before the introduction of the more accurate methods now available for the diagnosis of syphilitic infection, and that possibly, therefore, a re-examination of the question may be desirable in order to arrive at a juster estimate of the importance of alcoholism in this connection. The excretion of alcohol in the milk, which has been alleged to be a possible danger to the health of infants at the breast, appears to occur only when very excessive quantities of alcohol have been consumed by the nursing mother, and even then the amount excreted is probably too small to be of much account. To sum up, then, the position regarding the direct biological action of parental alcoholism on the offspring, it may be said that alcoholic excess during pregnancy can certainly injure the development and vitality of the embryo,

and that there is very strong clinical evidence that alcoholism in either parent may damage the germ-cells in such a way as to be the starting-point of a degenerative tendency in the stock. Further, it appears that this latter view is supported by the fact that the genital glands are specially likely to be affected in chronic alcoholism, and it is also confirmed by a certain amount of important evidence from animal experiment. We now pass to the consideration of the influence

CONVICTIONS OF WOMEN FOR DRUNKENNESS AND DEATHS OF INFANTS UNDER ONE YEAR FROM SUFFOCATION, 1913–1918

ENGLAND AND WALES

	1913	1914	1915	1916	1917	1918
Convictions for Drunkenness	35,765	37,311	33,211	21,245	12,307	7278
Deaths of Infants from Suffocation	1226	1233	1021	744	704	557

DEATHS OF INFANTS FROM SUFFOCATION—PERCENTAGE DISTRIBUTION OF CASES OVER THE SEVERAL NIGHTS OF THE WEEK IN 1913 AND 1918

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1913 . . .	14·1	12·8	10·1	12·1	10·7	13·6	26·3
1918 . . .	14·3	10·4	13·1	15·6	13·8	15·6	17·0

of parental intemperance as a factor in the deterioration of the environment, illustrating this influence by the facts relating to deaths from suffocation in infancy. For the very full data which we possess on this point we are indebted to Dr. Stevenson. Prior to the war one of the most striking and characteristic features of the statistics of deaths of infants from suffocation was the fact that a very dispropor-

tionate number of these occurred on Saturday nights. As drunkenness was also notoriously more frequent on Saturdays than on any other day of the week, it was natural to suspect that parental intoxication was an important factor in bringing about these fatalities. If this theory is correct, it follows that a reduction of drunkenness should produce two results—it should reduce the total number of deaths of infants from suffocation, and it should lead to a more even distribution over the week of such cases as still occur. Now, as you will see from this table and diagram which I submit, this is exactly what has happened in the last few years. Under the operation of Lord D'Abernon's policy of liquor control, there has been in this country an enormous reduction of drunkenness; the convictions of women for drunkenness in 1918 showed a fall of no less than eighty per cent. as compared with the pre-war standard of 1913. And, coincident with this decline of drunkenness, deaths of infants from suffocation fell from 1266 in 1913 to 557 in 1918, a decrease of over fifty-six per cent., and the excessive incidence of such deaths on Saturday nights, which is prominent in 1913, has practically disappeared in 1918. These figures illustrate—though, of course, by a somewhat extreme example—the influence of parental intemperance as a detrimental agent in the environment of the child, and they show at the same time to what an extent this influence has been eliminated by the system of liquor control enforced during the war. This latter fact—which has also been established quite conclusively by a mass of other statistical evidence—is of great importance from the point of view of this Commission. Parental alcoholism, as we have seen reason to conclude, is almost certainly a possible source of degeneracy of stock, and it is quite certainly a contributory cause, through environmental action, of infantile mortality and disease. It is difficult, no doubt, to attempt any positive estimate of its real effect in either of these directions; but even if we rate it below that of some other detrimental agencies, it has, on the other hand, as compared with these agencies, a greater degree of practical importance, in that it is susceptible of immediate and effective control. It is probably safe to assert that at the present moment more can be done to combat degeneracy, especially as manifested in feeble-mindedness and in certain types of insanity, by the prevention of alcoholism than by any other means.

1. THE CHAIRMAN. You don't give any opinion on the moderate use of alcohol?—No, except that in so far as it is not in excess it is hygienically indifferent.

2. So far as you can judge it has no effect one way or the other?—No. I should like to say with regard to Stockard's researches in America that he has carried out a very large number of experiments—the total number of observations dealt with comes nearly to 900 matings, producing over 1100 offspring—and he has found very definite evidence of high relative sterility, a high rate of still-birth and high mortality soon after birth when the parent animals were intoxicated with alcohol fumes. A number of observations have been done since Stockard's work, and in a number of cases they failed to get confirmatory results. Further investigation is needed. With regard to the effect of alcoholic excess in women during pregnancy, I have observed that women drunkards tend to produce a family after a type which is the converse of the syphilitic family. That is to say, the earlier-born children may be normal, then come mentally defective or epileptic children, then children dying soon after birth, and finally still-birth and abortions. Sometimes, however, a first-born child will be defective, and in a certain number of such observations which I have come across the woman herself has been under the impression that the child was conceived in drunkenness. It has recently been suggested that further evidence bearing on this point may be found in the experience of the neo-Malthusians; such persons, after practising contraceptive methods for years, may neglect to take precautions one day because they are drunk, and the child conceived through this oversight is often found to be rather defective. I give that for what it is worth. These observations are necessarily very limited. In passing to the consideration of the question of environment, and taking the single instance of the suffocation of infants, I may say that in using this I am really giving evidence which would come more fittingly from another member of the Commission, Dr. Stevenson, to whom we are indebted for these figures. Since the restriction on the liquor traffic began there has been a very marked reduction in drunkenness and other alcoholic phenomena in this country, and parallel with the movement of drunkenness has been the decline in the deaths from suffocation. In the year 1914, *i. e.* before the introduction of liquor control, there was a rise in drunkenness and also in the number of deaths from suffocation. The change in distribution over the nights of the week is illustrated by the second diagram. Observe how the enormous preponderance of week-end cases has been brought down.

3. Miss Michelmore. Where does the illustration as to

the effect of liquor control come in?—It began in the middle of 1915. The point I want to bring out is that the reduction and the change in distribution which have followed the reduction in drunkenness are perfectly natural and conceivable results, if one may assume that drunkenness has been the cause of the overlaying of children. No other change has occurred which could have brought about that; nothing has occurred that could simultaneously have brought about both results. Here is a table which shows the arrests for drunkenness, and which also shows the fall in the number of deaths certified as being due to alcoholism. Then there are deaths from cirrhosis of the liver and cases of attempted suicide, which are phenomena specially related to alcoholism —these have fallen in the same proportion as the fall in drunkenness. I may say that a good deal of investigation has been done in Germany in the last few years by working out family pedigrees, and the observations by this method more and more confirm the importance of parental alcoholism as a factor in the cause of certain types of insanity, notably dementia præcox. The last paragraph, I think, has, perhaps, an air of being a bolder statement than it really is. I don't want to suggest that parental alcoholism is by any means the largest, or even a very large, factor. It is not because it is so large a factor, but because it is so manageable a factor that it is important. It admits of control in a far clearer and more easy method than does, for example, syphilis. From that point of view it is, of all the present agencies making for deterioration, that upon which it might be possible to work in the easiest manner.

4. PRINCIPAL GARVIE. About the terms "moderate" use, or "excessive" use. I take it that Dr. Sullivan does not mean by "excessive" use the man who gets very drunk, but the one who keeps soaking pretty well?—Yes.

5. Just one other question as to these percentages. It is very interesting to observe that those of Wednesdays have risen and those of Fridays come very near Saturdays. Is Dr. Sullivan aware of any facts which may possibly explain that? Is there any distribution of wages over the week?—In a large number of areas in the country people are paid on that day. It is a big day in the miners' districts.

6. THE CHAIRMAN. Some people hold the theory that if people cohabit when one is drunk, conception is rare. Is that correct or not?—There is a certain stage of drunkenness in which, from its paralytical effects, it might be thought to be rare, but I do not think it is impossible, or even infrequent.

7. Sir Rider Haggard. As to the shrinkage in the overlying cases; would there not be other influences at work to bring that about? For instance, the rise in wages has made people more comfortable; and I have understood that in a great many of these cases drink is sometimes used as a cloak—I mean, they are cases, in short, of murder?—I think cases of that kind must occur. Although other factors may have contributed, if they had stood alone they would not explain the change in the distribution of the cases over the week.

8. Dr. Freemantle. As regards the deaths from suffocation, I remember hearing a very well-known health visitor definitely going against this interpretation. She said her experience showed that Saturday was a woman's heaviest day. On that day a woman had a lot of extra cleaning to do: she had the children on her hands instead of their being at school; she had her husband on her hands too; and really it becomes a case of oversleeping through fatigue. To what extent is it possible to interpret these results in the light of that? These matters have been materially relieved during the war in certain directions?—I hardly think that conditions were bettered during the war, especially with women working overtime for the most part in the munition factories.

9. In munitions you are speaking of, but not the home?—In home work it would not be modified, and it is difficult to see how the conditions under which women lived during the war could have been such as to relieve the ordinary strain. One difficulty in the way of that interpretation, apart from its being a small cause to produce a large effect, is the experience of 1914. There is not sufficient reason why in the second half of 1914, when that factor would have been in operation, drunkenness rose, and so did the deaths from suffocation, and yet at that time the beneficial effects were at their maximum—that is, the prices of food in relation to wages. Wages were up, but the cost of food was not much above normal.

10. Dr. Chalmers. In these statistics you have shown an enormous reduction. I see they go from two hundred and fourteen to six in regard to delirium tremens in Poor Law hospitals. Can you say how the figures are comparable?—They are from the same institutions as before.

11. Are they for both men and women?—On page 5 is women only, and on page 3 men only. One has stressed the figures for women obviously.

12. In the excessive alcohol consumption among the poor, the women drink because the men are at home to drink?

Is not that the whole history of delirium tremens?—I think it shows that the man was the source of the money in the old times, but the woman had ample money in the time referred to here.

13. Can you compare other things with this decrease in delirium tremens and this decrease in suffocation? Can you compare, for instance, the actual quantity of alcohol consumed by the population now and then?—No, not with these figures. They refer only to a limited part of the country.

14. It has been alleged broadly by certain prominent politicians that control has been a mistake, and that there has been more private drinking than before; and also that police arrangements have no earthly control over the consumption?—There are a great number of statistics which entirely disprove that allegation, notably the statistics of delirium tremens and of alcoholic mortality.

15. This list shows there has been a reduction of from 1200 deaths from suffocation in 1913 to 557 now. That covers the period when the husband was away and the wife stayed at home; when there would be less tendency to drink. Would it not be well to have some evidence regarding the prevalence of disease in infancy in other nations that do not drink at all?—I am not putting forward any statistics of infantile mortality from any cause except this.

16. Dr. Routh. I should like to ask, as I happened to have been looking up the subject of Stockard's experiments, if there is anything more known of the statement as to the effect of alcohol on the germ plasm?—There has been a great deal of work done in the investigation of changes in the condition of the genital glands.

17. As to liquor control, is it known whether the principle has been the lower percentage of alcohol or fewer opportunities for drinking?—In its essential principles, Lord D'Abernon's policy is really based on the fact that it takes a very short time to get alcohol into the blood and a long time to get it out. The two fundamental principles on which the policy has rested is, on the one hand, the broken times and the long abstinence periods during which drinking is not possible; and, on the other hand, there is encouragement in the use of the lighter liquors, by dilution of spirits and by weaker beer.

18. Dr. Routh. In your thesis you do not allude to those results you gave us some years ago as to infantile mortality and drunken mothers, when some hundred and twenty, or twenty-five per cent. of drunken mothers died

within two years—That is so. On that point I may remark that in recent experiments in America with alcoholised rats it was found that thirty pairs gave one hundred and eight young, while twenty-nine control pairs gave three hundred young.

19. Dr. Hope had the same result, only more so. He found a mortality rate of 49·8 per thousand births in eight hundred and seventy-four females. I believe it is a fact that alcoholic excesses are avenues to venereal infection?—Yes, undoubtedly there is a relationship between them.

20. Dr. Routh. Venerealism is largely a result of alcoholism, then possibly it is true that congenital syphilis acquired from alcoholic parents is of a worse type than that acquired by non-alcoholic parents?—I do not know that.

21. Colonel Bond. Was not the main point in Stockard's work the fact that he brought about these results by paternal drunkenness?—Yes, so as to obtain an action limited to the germ-cells.

Twentieth Day

Monday, May 12, 1919

The Bishop of Birmingham in the Chair

Statement of Mrs. Pember-Reeves

Some years ago we had this investigation, when I had a sum of money given me for the purpose of inquiring into the reasons of infantile mortality. I got together a committee of Fabian women, because I thought they would be the people who would undertake a thing of that kind, and we worked out a scheme by which we gave a kind of pension. It was only to be given for as long before the birth as we could discover when a birth was coming off, and afterwards until the child was one year old. We wanted to see what effect that small sum would have on the child. To do this we went to the York Road Lying-in Hospital and asked their permission to use the out-patients' list, and we simply took the names alphabetically of people within a certain distance, so that they were within reach of the weighing station at Moffat's Institute. In those days thirty shillings was the top limit of the wage we took. We decided that under eighteen shillings a week a woman did not have a fair chance anyhow, so we took no cases with less than that. Between those limits we went around to these people and

asked their help in the investigation. Three of the husbands in about fifty would not allow us to help, so we desisted. Naturally we did not get a woman as long before the birth of her child as we should have liked, but sometimes we had them for as much as thirteen weeks previous to the birth, generally because they had made a mistake in their calculation. The woman was to use that five shillings as she thought best for her own health and comfort. If she wanted beer, well, she could drink beer if she wished, but we suggested milk, and hoped that they would take milk. We did not rule out anything; we wanted to see what the actual money would do. We came across such extraordinary states of difficulty other than those connected with food, but I may say that we put housing, I think, as one of the reasons for mortality and weakness and misery.

The districts we took were Lambeth and Kennington, and some of the houses were too frightful. In those days the Duchy of Cornwall estate was in a terrible condition; the leases had not fallen in, and the landlord was helpless. After that I watched events with enormous interest. It is impossible to produce an economic rent out of people with the wage I have mentioned. We found you cannot possibly get an economic rent if there were to be several rooms, and really housing was in quite the most desperate condition, and altogether other causes were often more contributory to mortality than food. In the case of a woman whose husband was a 'bus conductor and who received four shillings a day when he got work (he could count on four days and sometimes five days a week, though there were occasions when he got a full week); we found that his wife had to pay out of, possibly, sixteen shillings, nine shillings for rent, and she had got three excellent rooms at the top of a high building, where it was light and airy and wholesome. She did not lose her children, though they fed on something like tenpence a week per head for food for the family. We found that people who went into cellar rooms and paid less lost five or six children. Things like that made us feel that people who economised in rent and spent on food were mistaken, although they were doing it with the best idea of what was right. We came to see what an extraordinary hardship a large family was to working people, and the desperate shifts they were put to. We also came to see, when we got to know a woman—sometimes we visited them weekly for fifteen or sixteen months, and then we saw them again on the day the baby was weighed, so that we saw them twice a week, at least, quite regularly—that those

who were sensible and looked ahead were doing all they could to limit their family. They did not know how, and they were doing it very badly, and with awful results to themselves and the children. We were perfectly horrified with that state of things. There were women whose children were all born too soon and were lost. We were fairly convinced that that was not entirely accidental, and that there is an awful state of things among women who are most anxious to limit their family but do not know how. Very often these are amongst the most thoughtful women. Those who have very large families say, of eight, were living herded together almost like animals. Children were sleeping four in a bed always. Four in a bed was the rule, and they had measles and whooping cough, and so on, all round the bed in turn. Women did not have their beds to themselves when their babies were born; the husband slept in the bed, and often two children as well, unless the man happened to be a night worker, when he slept there all the day instead. Because that was so horrible to us, the housing question came quite first. A man with many children would get no chance. He would be dismissed if he had more than one or two, perhaps. I see Mr. Sidney Webb talks of public authorities giving a wage in accordance with the number in family, but it seems to me that could not be done. We have been for a long time of opinion that there ought to be childhood pensions, because we see that these children are born quite good. It is most extraordinary how well they are born on the whole, and how healthy they seem. But it is simply heart-breaking, if you care, to try and follow these children up to a year old. What we felt was that they would have lived if we could have allowed the five shillings to attach to each child. In those cases where the allowance was made the fathers seemed extremely attached to the children, and thought much more of the child that had the five shillings than of the rest, because a well-fed child seemed to be more intelligent, and it gave more pleasure. The mother had the money, and we went every week through the household accounts to see exactly how she spent the five shillings. We make no sort of rule as to the spending of the money; they could do that in the way they thought best for the mother and the child.

1. The Secretary. And, on the whole, you found it was properly used?—Yes, but they seemed to think milk was such a wicked extravagance. In some cases where the five shillings was allowed, we found that in about four cases the husbands enlarged their wife's money by that amount when it came to an end.

2. THE CHAIRMAN. May I ask whether, in regard to this very interesting experiment, you laid any stress upon, or advised mothers to nurse their babies?—It was not a condition; but we did advise them to do so, and hoped that they would, and in nearly every case they did—really, I think, because it was cheaper, and was so much less trouble. We found that they wanted to nurse them.

3. DR. ROUTH. When you spoke of the widespread practice of the limitation of the families, what methods were employed to bring that about?—I think the methods were absolutely ignorant, rough-and-ready methods of doing themselves an injury. I don't think they had any scientific method. It was simply a case of stopping it at any risk whatever.

4. THE CHAIRMAN. Have you considered the question of, as a first stage, limiting the pensions to widows?—To my mind that would be a very small and a bad beginning. I want the women who are actively engaged in child-bearing to know that if they will have children decently they can have support and encouragement, and can feel that there is some safety in it. They do feel that their husbands do not want too many children, and yet that they are left to be the sport of fate.

5. DR. ROUTH. You speak of cases where parents are proved to be people of such habits that the children should be removed to proper care. What about the difficulties of ascertaining, and who is to be the authority to give the decision? Is the question to come before the magistrates for inquiry?—When we have the new Ministry of Health we imagine that you will have an enormously multiplied number of maternity centres and clinics to which people would be going normally. It seems to me that is the only way to begin. You will get into such close touch with the mother and child that an experienced person would very quickly know whether the home is really an unfit one. We have seen a good deal of the kind of spirit which says that to relieve an unfit parent of a child is wrong. We believe that the child should be considered first, and that whatever action be taken should be for the welfare of the child.

6. DR. STOPES. What is your objection to the ordinary scheme for endowing the mother rather than the child?—To begin with, that it is exceedingly difficult to work—it is clumsy. And when are you going to stop endowing her? Supposing she has one child, are you endowing her for life? I think if you are going to say she shall be endowed for two years for each child, it is rather undignified.

7. What would you do for the child?—Endow it up to the age of sixteen. You cannot hurt a child's dignity in that way.

8. I have heard the suggestion made that if mothers were endowed they would have their personal freedom to work interfered with.—I think so.

9. Would you deprecate that?—I would. I should like the mother to have the best treatment at birth, and an allowance in money before birth, so that she might have plenty to eat then and afterwards as long as she is nursing. Some mothers nurse much too long, simply to save the trouble and expense of feeding. I should say for a year after birth let the mother have a small allowance for her own nourishment or whatever she needs. She wants good nursing, good medical attendance, and good medical advice as to her own health.

10. All one can do is to get the community to realise that there is a tremendous sacrifice in motherhood?—Not always. I do not believe in being paid for motherhood a bit.

11. I would like to inquire further about the efforts of women in crowded tenements to limit their family. You find frequent cases where they have injured themselves in trying to bring about abortions?—I am giving my impressions. They give hints, and I can understand what they mean by those hints, yet if you were to bring one of them here she would swear that she never did any such thing.

12. If there is overcrowding and all this terrible poverty, and there is this attempt to limit in injurious ways, do you think it is advisable for them to know of some hygienic methods?—If it could be done properly and officially, I think it would be. But I do not believe in people running around after them. If it was open and above board every married woman who wanted to know might be informed.

13. Would you be in favour of clinics giving this information?—I should like it done quite openly—privately, of course, but in a proper official way. I think it would prevent a lot of horrible ill-health and misery.

14. Miss Broome. Have you any idea of the expense your scheme would be to the country?—I am afraid I have not. It would, of course, be a large expense.

15. Have you any idea that if this were done that hundreds of fathers would see that they only had one child to get the grant, and then be less attentive and trouble less about working?—I don't think that would be the result myself.

16. I was speaking at a meeting of the Mothers' Union about the endowment of parenthood, and they were dead against it, except for widows. I am absolutely for it for widows that require it, but I feel that if you do this you will

help raise a large army of unfit, and make a distinction between which parent is to have it, and you will also help to increase the number of undesirables?—My own idea is that the parents would disburse it for the child. My conception of it is that the parents would have to go to a clinic, and satisfy that clinic that the child was properly cared for. I should make it compulsory upon attendance at the clinic, and personally I should like to have no wage limit.

17. Would this be enough to keep the widow at home to look after her child—that is what we as teachers are so anxious about?—I am only thinking of the pension of the child. I am not thinking of keeping the mother in this. You would have to deal with the problem of the widow, I think, quite differently.

18. MONS. PROV. BROWN. Do I understand the witness to say that she would favour the public machinery of the clinics to be set up under the Public Health Act for teaching people how to avoid having children?—I think it might be understood that there was a doctor or a properly qualified public officer who might tell people how to manage. If you do otherwise, people manage it just the same, but to the detriment of their own health. I should like whoever does it to be properly qualified—expert men or women, and I think a woman for preference.

19. I think you will agree that in most of these buildings on the Duchy estate there is very little provision for a rising family.—I do.

20. Very little provision for more than two if the sexes were different?—I quite agree.

21. And the reason for that which you give is a financial one?—No landlord can provide adequate provision for the rent these people can afford to pay.

22. Would it be any difference if the State provided this housing accommodation instead of private money to buy housing accommodation from the landlord?—I should not object to some assistance from the State being given the child in kind.

23. Do you see any great objection to a State-provided scheme for rising families? I think you said that housing was the crux. I suggest that the State should provide that and not the cash to pay rents with.—You could not substitute just house-room for everything.

24. A State-endowed scheme on the Duchy of Cornwall Estate would have kept these people in houses that are now let to Jews, and so on, who work in Piccadilly, and the former population has been sent into Balham and Tooting

to make another slum. A State scheme could have dealt with that?—Yes.

25. But the Duchy has not done so because they must make a living out of their property? I suppose you know that the land charge works out very heavily, as well as the building charge?—I don't follow.

26. The rent a person pays goes part to the ground landlord and part to the person who puts up the brick and mortar. You know the Kennington Park Road and the clearance made near St. Mary's Church? Well, that estate was bought by the Guinness Trust at £11,000 an acre, which was said to be a low price. The Guinness Trust worked out the figures, and the cost of each tenement to the occupier of the tenement was two shillings and sixpence per week to the ground landlord. Therefore the land which the Ecclesiastical Commissioners sold involved two shillings and sixpence per tenement before the buildings go up and before you begin the economic rent. You see that the ground charge does operate very largely?—I see it does.

27. Supposing the State fixed a minimum wage; is it beyond the wit of man to say that so much shall be taken out from every one, which will form a pool, out of which married people would get so much per child? From the pool you would help the parents to maintain the children by child payment?—I think it would be better if other people helped too. I suggest that this is a national thing, and it should be open to any one without limit.

28. Miss Michelmore. In your scheme did you deal with the unmarried mother?—No, we did not.

29. You would have dealt with them in the same way?—If we had known when we began all that we knew when we finished, then we would have begun in a different way.

30. You took an income limit. I was just wondering if a man happened to be close to the income limit whether he would not be just as well off taking the allowance and a lower income?—I agree that an income limit was put in, but it was by some one else. Personally, I would limit it only to the people who would come to the clinics. Make it an absolute rule that no child that did not turn up regularly at the clinic would get it.

31. Mrs. Clay. You mentioned several times the freedom with which a mother was allowed to spend the allowances, and said that if they liked they could spend it on beer. Were the "beer-reared" children an ornament to the clinic?—Is not that a rather excessive phrase? Lots of mothers, even in our walk of life, drink a little stout in

nursing, but our children are never called "beer-reared" children, because it would be too insulting. These mothers had been taught that stout was a good thing to help with their nursing, and we did not want to fight that. They had a pint of stout a day, and so we allowed them to do it.

32. Because it was an experiment, I suppose?—We wanted to see what did happen.

33. It was in the nature of an experiment, and perhaps would be somewhat modified in any permanent scheme which you might draw up for the disposal of such funds?—You mean that if the Ministry of Health was allowing them five shillings a week they should stop it if the mother had beer.

34. But you would have to make some conditions to see that the money was spent in a beneficial way?—I think I should only go by the state of the child. If the child was well and happy, I should say, "Do what you are doing; you cannot do better." If the child was not well, I would not stop investigating until it was put on its feet again.

35. THE CHAIRMAN. How long did the experiment go on?—It went on for about six years.

36. DR. STOPES. Did you make any plans for extending the benefit not only to people on small wages, but to those of the better classes on whom the pressure comes heavily?—My personal feeling would be to leave it entirely and not make a wage limit. I think it would be like education—I don't think that middle-class people use the State schools enough; I should like to see them make much more use of them. I don't think they would use this enough.

37. MISS MICHELMORE. As to payment in kind, would you make it without any choice?—It is a new idea; I do not think that is a possibility. I think you would have to try it in some way and see how it worked.

38. MISS BROOME. Have you made any special allowances for milk?—No, but we urged them to use milk even when breast-feeding; we told them they should drink milk.

39. DR. ROUTH. On the question of limitation of families; you were alluding more to criminal abortion?—I suppose you would call it that; it was something that was not natural or good for them. They would prefer limitation in a much less painful and miserable way, of course, but they had not the money nor the knowledge.

40. Did they endeavour to find out?—They got one another to tell them good "tips" that people had tried and found had worked when they were pregnant. They tried all sorts of things, and drank all sorts of things; they did heavy days' washings and scrubbed down walls.

41. You have no ideal method to recommend these women?—There is no place that I know of to tell them where to get the necessary arrangements or advice. They come, and we say, "Go to your Medical Officer of Health or to your district nurses."

42. THE SECRETARY. May I ask whether you discovered them using diachylon, the lead pills we prevented the use of?—No.

43. DR. ROUTH. As regards a Help Society such as yours—the Fabian women—what is the rate of income that a working-class family of six should have and a clerk's family of six? The income of the clerk may be larger, but he certainly needs as much help as the working man.—I should say that six children anywhere need at least thirty shillings to feed them. I am indifferent as to whose children they are; they will be better value for that, at least, spent on them.

44. Six children at the rate you propose and with the mother pregnant again, is thirty-five shillings. You have not given us a scheme showing what you really want, except your statement about five shillings until the age of sixteen?—I think you would have to begin with something more or less of this nature. That would be a help to those who need it most, and after that you could work out differentiations.

45. You speak of parents who are not looking after their children properly, and you say such children should be removed from their care "into proper care, such as that of kindly relatives." A parent would be very angry if a child was taken away and given to a sister. Don't you think it would be better to have them taken right away to foster-parents?—If a relative is not fit I would prefer foster-parents.

46. THE CHAIRMAN. You mean you would prefer that to institutional treatment?—That is what I mean.

47. DR. ROUTH. With a large scheme like this I should think you would be landed in great difficulties?—I don't think that you would have enormous numbers of people who wanted to be separated from their children.

48. THE CHAIRMAN. In regard to one question, I form a mental picture that in your scheme the clinics would be the "finding-out" bodies, and they would then advise the proper administrative authorities. In a case where it is difficult to tell by the look of a child you would not, for instance, propose taking the grant away in the case of children suffering from venereal disease?—My own view is that whatever the guilt of the parents the child must not suffer.

DR. EWART *then presented the following statement—*

My point in bringing this before you, is really to create an interest, to ask your assistance, and also to induce you to hold your hand to some extent before expressing a definite opinion on matters of far-reaching influence. I am not going to say anything about the immediate effects of birth control. Under our present economic conditions it is, of course, beneficial, but I want to touch on the more remote effects. I have, in the last ten years, made certain investigations on the influence of parental age. I have come to the conclusion that parental age has an effect on the character of the child. Speaking generally the effect of parental age is to increase the variability of the later born. The curve for character is flattened out. The later born show a greater variety in mental type. Children of parents who reproduce before thirty seem to be more uniform.

The consideration of the birth age distributions in sections of the population of different birth-rates, shows the assumption that the curtailment of the family falls mainly on the end of the reproductive period to be incorrect. In fact, as the birth-rate falls the relative number of late births increases, and is accompanied by a reduction of those born earlier in life. The main loss is amongst those born at maturity. A comparison with the distribution of a feeble-minded population shows that the best fits are given by the population of the smaller birth-rate, hence it is not unreasonable to suggest that the falling birth-rate should be associated with lunacy or feeble-mindedness. When the distribution of this generation is traced backwards to the parents or grandparents, the preceding generation shows a flatter curve. The difference in the first half can be explained by the change in mean age at marriage, the change in the second half, however, cannot depend on the fall in the birth-rate, hence we may assume that the late-born reproduce faster than the earlier born. It is suggested that these points are of sufficient interest to merit further inquiry on a much wider basis than has been possible in the present instance. There is no evidence to believe that the mean type predominates at any particular part of the reproductive epoch. The variability, however, changes as the parturients advance in years. Those who reproduce in late life represent a selection of all parents, the selection being of such a nature that the mean is not materially altered, but the extremes of the curve are cut off for some characters. Up to the fifth year correlation is marked, but after that age it gets small and

variable. The variability, however, which is at present at birth increases as the correlation disappears in certain instances. In all cases examined there is an increase in the standard deviation of those born after the thirtieth year, whilst reproductive selection would have led us to expect a decrease. There is one exception to what appears to be a general rule, namely, fertility. The "Standard Deviation" of the size of families of those born late in life is less. Order of birth and height show a significant correlation which can be attributable to birth age and interval. "Interval of birth" in a working-class population gives a significant association which is increased when birth age and reproductive selection are taken into account. In a good class population, where domestic help is obtained, the correlation becomes insignificant, suggesting that the damage due to excessive child-bearing is dependent upon circumstances which are associated with it and are removable. It would seem to be a better policy to remove these circumstances than to restrict the output.

REPRODUCTIVE SELECTION

Fertility : England and Sweden

Born at	20 & under	21–25	26–30	31–35	36–40	41 & over
England (Middlesbro')	582	461	389	233	126	48
Sweden . . .	518	451	375	312	250	142

Coefficients of correlation are :—

Age of father at birth of son and death of father .	[1]·25 ± ·02
Age of father at birth of son and age of father at marriage	·73 ± ·01
Age of mother at birth of child and her own eye colour	·01 ± ·03
Age of mother at birth and her own height . .	·04 ± ·03
Age of mother at birth of child and her own standard (crude)	·06 ± ·03
(partial)	·06 ± ·03
Age of mother at birth of child and her own standard (2nd series), (crude)	·11 ± ·04
(partial).	·14 ± ·04
Age of mother at birth of child and her own age at leaving school (crude)	·03 ± ·03
(partial)	·06 ± ·03
Age of mother at birth of child and her own age at leaving school (2nd series), (crude) . . .	·08 ± ·04
(partial) . . .	·02 ± ·04

[1] Partial correlation.

STANDARD DEVIATION OF THOSE WHO REPRODUCED

	Before 30th year.	After 30th year.
Father at death	7·04 ± 13 yrs.	6·34 ± ·15 yrs.
Mother's height	2·35 ± ·05 ins.	2·13 ± ·15 ins.
Eye colour of mother	1·12 ± ·02	1·41 ± ·02 [1]

BIRTH ORDER AND INTERVAL

Interval of birth and mother's age	·36 ± ·03
Height of mother and order of birth	·07 ± ·03
Height of mother and interval of birth	·05 ± ·03
Number of children born and mean interval of birth	·04 ± ·03
Age of mother at birth of child and interval of birth	·36 ± ·03
Number of children born and height of mother	·10 ± ·03

	Boys.	Girls.
Order of birth and height of child	·11 ± ·03	·14 ± ·03
Interval of birth and stature of child	·11 ± ·03	·06 ± ·04

BIRTH AGE CORRELATIONS

Death

Age of mother and miscarriage rate	·28 ± ·02
Age of mother and infant mortality	·12 ± ·02
Age of grandmother at birth of mother and number dying in the family	·09 ± ·02
Age of father and deaths amongst sons	·04 ± ·02

Marriage

Age of father at birth and age of son at marriage	·11 ± ·02
Age of mother at birth of husband and age of husband at birth of wife	·11 ± ·02
Age of father at birth of husband and age of father at birth of wife	·05 ± ·02

Number of Children Born

Age of father at birth of son and number of children born (partial)	·01 ± ·02
Age of father at birth of son and number of children born to son	·08 ± ·02
Restricted series	·03 ± ·03
Age of grandmother at birth of mother and number of children born to mother	·06 ± ·02

Sex

Age of mother at birth of offspring and sex ratio	·06 ± ·01
Age of mother at birth of offspring and sex of abortions	·03 ± ·02
Age of grandmother at birth of mother and sex in families	·14 ± ·02

[1] No allowance is made for the fact that eye colour becomes indistinct as age advances, and hence an undue proportion are classed as grey. Measured by arbitrary units.

Infectious Diseases

Measles—

Age of mother at birth and age of attack . .	·10 ± ·02
Age of mother at birth and proportion attacked .	·14 ± ·02
Whooping cough. Proportion attacked . .	·15 ± ·03
Scarlet fever. Age of attack	·02 ± ·01
Diphtheria ,, ...	·03 ± ·03
Enteric fever ,, ...	·03 ± ·05
Small pox ,, (father) . . .	·07 ± ·03
,, ,, (mother) . . .	·09 ± ·03
Tuberculosis ,, ...	·00 ± ·03

Weight

Age of mother at birth and weight of infants . .	0–13 wks.	—·15 ± ·03
Age of mother at birth and weight of infants . .	14–26 ,,	—·14 ± ·03
Age of mother at birth and weight of infants . .	27–39 ,,	—·08 ± ·04
Age of mother at birth and weight of infants . .	5th year	—·01 ± ·02

Stature

Age of father at birth and height of child in the seventh year	·04 ± ·02
Age of mother at birth and height of child in the seventh year	·05 ± ·02
Age of mother at birth of offspring and height of adults	·02 ± ·02
Height of child and age of mother (boys) . .	·04 ± ·03
(girls) . .	·03 ± ·03

Eye Colour

Age of mother at birth of child and eye colour of infant (under 6 months)	—·2 ± ·03
Age of mother at birth of child and eye colour of infant (6 to 12 months)	—·12 ± ·03
Age of mother at birth of child and eye colour of infant (school child)	·05 ± ·03
Age of grandmother at birth of mother and eye colour of mother	·00 ± ·02

Intelligence

Age of mother at birth of child and her own standard (fifth year)	·06 ± ·03
Age of mother at birth of child and her own standard (thirteenth year)	·15 ± ·04

VARIABILITY OF CHILDREN BORN BEFORE AND AFTER THIRTIETH YEAR

	Born before 30th year.	Born after 30th year.
Standard deviation of son at death, born of parents	7·09 ± ·16	7·80 ± ·19
Standard deviation of number of children dying of mothers born of grandparents, born of parents	1·83 ± ·03	1·89 ± ·05
Standard deviation of height of children at the ninth year, born of parents	2·34 ± ·05	2·44 ± ·06 ins.
Standard deviation of age of attack of scarlet fever	3·71 ± ·06	4·42 ± ·10
Standard deviation of age of attack of diphtheria	3·56 ± ·8	3·88 ± ·11
Standard deviation of age of attack of small pox	2·70 ± ·11	2·89 ± ·12
Standard Deviation of Weight		
0–13 weeks	2·26 ± ·06	2·33 ± ·06
13–26 weeks	2·43 ± ·06	2·59 ± ·06
5th year	4·15 ± ·16	4·11 ± ·16
7th year	2·94 ± ·18	4·10 ± ·30
14th year	10·35 ± ·57	11·44 ± ·80
Fertility		
Standard deviation of number of children of son (complete families)	3·71 ± ·08	3·45 ± ·07
Standard deviation of number of children of daughter (incomplete families)	2·88 ± ·05	2·75 ± ·06

1. DR. ROUTH. Will you explain the first two figures? How do they give us this fact, that in the British peerage the age at marriage, and the time that intervenes and so on, is correlated with the date of the father's death?—Here are a large number of correlations, showing how the characters change according to the age at which the parent reproduces.

2. Personally, I do not understand these figures at all. Can you tell us how you arrive at these figures—" the age of father at birth of son and the death of father ·25 ± ·02"? What does the ·25 mean?—The correlation is the means by which we measure the association between two variables. We express the whole thing as one figure.

3. This is a matter of statistics. Does it exclude biological factors, including venereal disease?—I am taking the peerage. The mean age at death of a peer is sixty-five. The

mean age of the general population is forty-five. The amount of contagious disease cannot be great.

4. Dr. Stopes. I think you said they were more fertile? —Yes, I say that those peers who are highly fertile do not generally live to a great age, but some peers have lived to over a hundred.

The Secretary. I think I ought to say, for the convenience of the Commission, that when the Statistical Committee come to draw up a report, our statistical experts will go over the figures and produce their report thereon, so that you need not now be concerned to analyse them.

5. The Chairman. Let us try to be clear. As you limit the birth-rate you say you get less variability?—Let me put it this way: First, as you limit the birth-rate the relative numbers born late seem to increase relatively—they are not reduced. Secondly, owing to reproductive selection, the offspring should tend to become less variable, owing to heredity.

6. As against the children?—The children seem to go in the opposite way. That is to say, the type of the women who reproduce gets less variable, but the children seem to become more variable. As regards birth order, the variations found can be referred to the interval and age at birth. There seems too little in birth order as a factor. The characters we possess seem to be dependent upon the interval of birth, the age of the parent when we were born and other parental characters. The interval of birth has a marked effect on vitality under our present economic conditions.

7. A woman might have a child every year?—If she has no housework, and no material damage is done at, or subsequent to, the birth. She cannot reproduce and maintain the ordinary minimum standards of life. If she does both—one or the other goes. So long as a woman devotes her whole attention to it, she might manage it. Generally speaking, she enjoys better health whilst she is carrying a child.

8. Mons. Prov. Brown. She can as long as she has every possible advantage, but as soon as you bring in economic stress, work or births, then the whole thing breaks down?—A middle-class person could do it. She has assistance and can get what she needs. Ill health is sometimes attributed to child-bearing; it is probably the effect of age and other causes. The mere fact of the number of children should have no effect on a woman's health beyond the accidents to which all are subject.

9. DR. STOPES. She might have any number?—If she has not to look after them.

10. Have you any data for that?—That is my opinion.

11. You don't often find in the large families that all the children are healthy?—If parental age is made constant, the death-rate falls as the family increases in size.

12. DR. ROUTH. You have not troubled to bolster this up by any authority such as Bateson or Osborne?—I don't believe Bateson has collected data bearing on the point. Morro deals with Italian material, and brings out much the same sort of thing. The French Government also conducted an inquiry in regard to age, etc., but unfortunately the data does not get the actual age at which the child was born, and consequently it is difficult to deduce the actual characters of the offspring; there are many others. The correlations I have found are quite distinct up to the fifth year. Thus late births seem to develop their eye colour quicker than the earlier ones. They are less susceptible to measles than the earlier ones, but will be more liable to die if they get it. They will be different in regard to the other infective fevers. Intelligence will also be different. I want to suggest that there are antagonistic processes at work balancing each other. There is a general tendency to cut off the extremes of the population by reproductive selection; further, there is a biological tendency to disperse the type of the population by what I might call "natal dispersion," and the two seem to balance. If you introduce birth control you are upsetting the balance. This balance was apparently running fairly equally and comfortably up to about 1800; the population was at that time fairly stationary, then, through various causes, a large number of children survived that would have died. From 1875 onwards the birth-rate began to fall, as it naturally should, but the Education Act, and all that is associated with it, changed a slow fall of birth-rate to a rapid decline.

13. Since education came in?—Compulsory education. It was coming down before as a natural result of the fall of the death-rate. If you are going to re-establish the balance, you practically have to destroy your power of being educated, or you must so educate the population to so control their births as to maintain the characteristics of the race. I hardly think that is a feasible proposition. If you want a tall population or a little one, a blue- or a brown-eyed one, you can get what you want. You can breed the human race in the same way as horses or dogs.

14 THE SECRETARY. Do you suggest we should do that? —No, I don't.

15. DR. ROUTH. How has the Education Act affected the birth-rate?—It enabled everybody to communicate with each other with greater facility, and various counter-attractions have come into vogue, with the result that the ordinary sex pleasures in many senses have been displaced. Bradlaugh's campaign became possible, but it was impossible before education came in.

16. THE CHAIRMAN. Would it be untrue to say that it is directly due to this special education of Bradlaugh's, and only indirectly due to general education? It should be attributed as a whole.

17. MONS. PROV. BROWN. With the compulsory Education Acts a child became more and more a burden than before, and then the parents attempted to restrict?—The two factors are associated.

18. DR. ROUTH. And you say that the late born reproduce faster than the earlier born?—That is a statistical observation, and one finds also that death is associated with the birth-rate.

19. In the last clause on the first page you state that families in a good position, as regards domestic habits, for instance, could have children without effect on the mother, but that the working classes could not do so, and you finish by saying, "It would seem a better policy to remove these conditions than to restrict the output." You mean that instead of restricting the output children should be given assistance to enable them to get along?—All I am talking of is the actual racial characteristics.

20. Practically you say that the greater the fertility the shorter the life expectancy. You are referring to the male parents?—I am dealing with the male parent only in this case.

21. How do you think that acts? What is the explanation?—It is a simple association of fact.

22. THE SECRETARY. The shorter-lived have more children, and the longer-lived have fewer?—Yes.

23. DR. ROUTH. As regards the effect of education, including sex education, you state that biological reaction has been enormously exaggerated—that is to say, people become aware of how to restrict their families, and you finish by saying, "A considerable mental deterioration must occur if the regulating mechanism is to be established." Does that mean that mental depreciation will prevent conception, or that we must educate less, or in another

direction?—I probably ought to have put there mental alteration. I have absolutely nothing to do with what is good or bad. I should like to withdraw that word.

24. Miss Broome. You believe that children produced after forty-one are more likely to be defective?—They would be more variable in type.

25. I was thinking this way: You are saying it would produce more feeble-mindedness, but there are lots of women who marry later than others?—It is for you to discourage that.

26. I was wondering whether such children would necessarily be feeble-minded?—Not necessarily, but they will be more variable.

The Chairman. There will be more room for genius as well.

27. Dr. Sullivan. Birth control exercised at a later stage of married life rather than the earlier is not objectionable and rather beneficial?—If universally carried out it would be all right, but, of course, it would not be. If you are going to interfere with feeble-mindedness, you are going to interfere with other characteristics which you may probably want.

28. As compared with what you might call the special ethical method of birth control, you would consider that that was desirable as compared with the restriction of later births?—A reduction of the marriage rate is the worst form of birth control. I should like to see four children before the age of thirty.

Twenty-First Day

Monday, May 26, 1919

Rev. Principal Garvie, M.A., D.D., in the Chair

Statement of Mr. Harold Cox

In considering the problem of birth control the first point to notice is that neither the birth-rate nor the survival rate give any necessary measure of the rapidity with which the population is increasing or decreasing. A rate means nothing unless we know the volume over which it is taken. A rate of two per cent. on a million pounds yields a larger income than a rate of twenty per cent. on a thousand. In the earlier years of the present century many people asserted that our population was declining because they observed that the birth-rate was below the maximum reached somewhere about 1876. As a matter of fact, the population of England

and Wales increased more in the first ten years of the present century than in any previous decade of our history; it increased more in those ten years than in the whole of the eighteenth century.

Every growing organism must diminish its rate of increase as its volume grows. For example, a healthy baby weighing at birth about seven pounds doubles its weight in the first five months of its life. If it maintained the same rate of growth it would when five years old weigh over twelve tons.

A similar consideration applies to the population of a country. The population of England and Wales doubled in the fifty years between 1801 and 1851; it again doubled in the sixty years ending 1911. Suppose the previous rate of increase had been maintained and were to be continued indefinitely, then in the year 2201, or less than three centuries from the present date, the population of England and Wales alone would be 2,295,000,000, or considerably more than any estimate of the present population of the whole globe.

No further argument, I submit, is needed to prove that the rate of increase in the population of any country or of the whole world must decline as the volume grows.

The rate at which any population increases can only be reduced in one of two ways: either by reducing the birth-rate or by expanding the death-rate. From this arithmetical alternative there is no escape. Opponents of birth control may, of course, argue that the time has not yet come to make the choice; they may even go the length of asserting that England could still afford to go on doubling her population every fifty years, as she did in the first half of the nineteenth century. But such arguments and assertions only postpone the issue. If birth control is in itself immoral, it will be still immoral when our population has reached such a volume that the necessity for a reduction in the rate of increase becomes indisputable. When that time arrives, if birth control is banned as immoral, we shall be forced to choose between various methods of death encouragement, such as infanticide, chronic under-feeding, periodic massacres, and the propagation of deadly diseases. It would facilitate discussion in the present controversy if those people who to-day denounce birth control as immoral would plainly state which of these various methods of death encouragement they prefer.

Whether birth control—assuming it, as I personally do, to be preferable to any of these alternatives—ought to be practised now, is another question. In considering this question the most important fact to notice is that a high

infantile death-rate is the almost invariable accompaniment of a high birth-rate. Thousands of children are daily born into the world who are fated only to live a few weeks or a few months. This rapid passage from life to death not only involves a vast waste of human effort, such, for instance, as medical attendance and so on, but it also involves an enormous volume of unrequited suffering—suffering borne by the mother and unrequited by the joy of rearing a child. I doubt whether the world would so long have tolerated this needless waste and suffering if women had been able to play a larger part in framing laws and in elaborating religious creeds. Even now for many women in England married life is one long disease.

In the East the waste of women's bodies and of infant life is even more appalling. Precise figures are difficult to obtain, but both in India and China out of every thousand children born often more than five hundred die. It is curious that while so much philanthropic thought is now being devoted to the prevention of disease, a large number of people, professing to be lovers of humanity, should deliberately oppose measures intended to check that most deadly of all diseases—the disease of excessive procreation. If only for the sake of diminishing human suffering and saving human life, the knowledge of how to control births should be spread throughout the world, so that it may become common property even among the least educated classes, and among the least civilised races.

The saving of women's sufferings and of children's deaths is not, however, the only human advantage of birth control, quite apart from all questions of local over-population. If children come too rapidly it is impossible for their parents to afford the time or the money to bring them up well. The educated classes have realised this fact, and now almost universally practise birth control. Notably is this the case with doctors and clergymen. The more prosperous artisans and the more prudent agricultural labourers are doing likewise. It is only among the thoughtless and feckless elements of the population that a high birth-rate continues, and most of the children of such parents are subject to conditions which make the rearing of healthy men and women extremely difficult.

Faced with this fact the Socialists propose to give a State subsidy to every woman who produces a child. That would only increase the evil. A child born and reared in a crowded urban area has only a poor chance of becoming a fine specimen of humanity, even if the State pays for its maintenance.

Moreover the prospect of the State grant would probably lead to an increased production of babies by persons who are least fitted to be the parents of our future population. The success of our race depends on the presence in our population of a large proportion of individuals who have inherited the English instinct of self-reliance, and have been brought up from childhood in the atmosphere created by that instinct. Children begotten and reared by parents who are subsidised by the State for performing the duties of parenthood will probably be content to lounge through life leaning upon the State. And if the greater part of the population leans upon the State, upon whom is the State to lean?

Equally serious is the consideration that the children of State-subsidised parents are likely to lose something more precious than money—their mother's love. This danger is clearly indicated by a German experience. The Germans established a few years ago an imperial grant to mothers who suckled their babies. Last year's Local Government Board Report on Infant Welfare in Germany states: "It is recorded from a large number of centres that mothers discontinue breast-feeding immediately the imperial allowance ceases, regardless of the well-being of their infants." The schemes advocated by Mrs. Pember-Reeves and others would, in my opinion, inevitably lower the standard of the English race and dehumanise the relationship between parent and child. Fears have been expressed by many people lest the decline in our population which has at last begun should weaken England in relation to foreign countries. I see no reason to dread that danger. In the late war the low birth-rate nations showed more staying power than the high birth-rate nations. Earlier history confirms this experience. If mere numbers settled wars, the English race would long ago have been wiped out by the French. During the eighteenth century England was engaged in an almost continuous struggle with France. England then stood alone, for Scotland during part of the century was in a state of rebellion, while Ireland not only had to be garrisoned by English troops, but supplied men to fight under the flag of our enemies. In this century-long struggle England won; yet throughout the century the population of England was only a third of that of France. We need not, therefore, necessarily disquiet ourselves if the German population should increase more rapidly than our own. As a matter of fact, during the war the population of the United Kingdom has slightly increased, while the population of Germany has heavily declined. In any event it would be futile to attempt

to deal with the German peril by means of what may, perhaps, best be called a cradle competition. In such a contest we must inevitably be beaten, because Germany starts the race with a much larger volume of population. Even if we went back to the maximum recorded birth-rate for England and Wales, 34·6 per 1000, and extended that rate to the whole of the United Kingdom, our production of babies per annum would fall short by some 800,000 of Germany's production with the same birth-rate. I venture to ask the advocates of unlimited procreation whether they seriously propose that the women of England should enter into a competition with the women of Germany to produce as rapidly as possible children whose final destination is to be the destruction of one another on the battlefield. It is not beyond the wit of the Western nations of the world to design better measures than this for dealing with a possible renewal of the German peril or, alternatively, with a Russian or Asiatic peril.

Finally, I pass to the question whether England at the present moment is over-populated. I think that it is. Many people talk loosely about the possibilities of further agricultural development in the British Isles. Doubtless there are such possibilities in some districts; but measured in terms of men and women employed, the maximum additional population that could be provided for is only a few hundred thousand. Yet the metropolitan area alone contains over seven million people, more than half of them living under conditions which are irreconcilable with complete health. Our other great towns present a similar picture. Doubtless considerable improvement would be effected if our industries could be removed from towns and established in garden cities. But if this process could be and were carried to the point of giving all our over-crowded millions a quasi-rural surrounding, there would be no real country left. I believe that the destruction of the solitude and natural beauty of the English countryside would involve a loss to the nation which no growth in material riches could make good.

Our island is too small to afford possibilities for a full life to all the millions now crowded upon it. I therefore welcome the decline in population which has been recently recorded in the returns of the Registrar-General, and hope it will continue. I have no fear for the future of our race if the duty of maintaining it is left to those who are prepared to rear at their own expense the children they deliberately decide to bring into the world.

1. PRINCIPAL GARVIE. As regards the first paragraph about the increase in population, you have not got the exact

figures, have you?—They are in *Whitaker* and in the returns of the Registrar-General. Roughly speaking, our population increased by a little over three and a half millions in the first ten years of the century, and in the whole of the eighteenth century it only increased by two and a half millions.

2. Do you think that biological analogies are useful in dealing with sociological facts? Is there any analogy between the baby and society to justify their growth?—It is not a biological law, it is an arithmetical law that in all things the rate of growth must decline as the volume increases; otherwise you would quickly reach a point which is impossible.

3. LT.-COLONEL FREEMANTLE. Arithmetically, but that is not the case when the increase is in geometrical proportion?—Whatever you are dealing with, there comes a time when further expansion becomes impossible, and I merely state an arithmetical truism when I say that as the volume gets greater a given rate of increase means more. Twenty per cent. on a million means a good deal more than twenty per cent. on a thousand.

4. THE CHAIRMAN. You do not make any allowance in forecasting what might be the population of England, and so on, with emigration on a large scale?—I thought, if I may say so, that was so well dealt with by Sir Rider Haggard, that I omitted it.

5. Do I understand what you mean by birth control? On this Commission we have found it rather ambiguous. Do you mean the use of artificial methods of preventing conception?—Any device which people use to prevent having children they do not want.

6. Including voluntary abstinence from marital relationships?—Yes.

7. You understand that there are some persons who oppose birth control in the sense of the use of artificial contraceptives who might argue that by voluntary restraint numbers of a family could be restricted?—My proposition covers both.

8. You speak of birth control being regarded as immoral. That applies only to those who would so regard it, but I don't think it could be suggested here that it would be immoral for people to consider how many children they should have?—That may be so in England, but in some other places—in India, for instance—it would be most immoral not to have a child. I believe that the Jews take the same view.

9. Then you refer to the accompaniment of a high birth-rate with a high infantile death-rate. Are these necessarily concomitant? Is it a case of causality?—I think so, because

a mother with a multitude of children has not time to care for them all properly.

10. Who are the responsible people in this country who would actually advocate the excess of procreation which involves misery for mother and child?—I think, by implication, all those who oppose birth control.

11. Suppose a man advocates strict self-control on the part of both parents, but oppose use of artificial contraceptives, is he an advocate of an excessive birth-rate?—In effect, yes!

12. Do you consider that human nature being such as it is, voluntary self-control is not to be taken into account?—It is not sufficient.

13. Do you suggest that a subsidy would only make things worse—that children born under such conditions would grow up into healthy manhood, and parents would bring forth children for the sake of the State grant? Is it not the fact that among the reckless poor they could not have any children more than they have already, and that probably they are so reckless that the State grant would not increase their family for them in any way whatever?—It would create an additional motive.

14. Would you prefer that the infantile mortality should be allowed to go on, or see steps taken by society to prevent that mortality?—No, what I am advocating most strongly is that all these people should be taught to control the birth-rate.

15. Do you think that as a remedy for the evil it is better to reduce the birth-rate and go on reducing it, rather than try social and economic means of making a higher birth-rate possible?—I think it is most important to reduce the birth-rate very rapidly.

16. Then I cannot quite follow the reasoning about the subsidy to mothers depriving the child of the mother's love, and the incidents that have taken place in Germany. I suppose that the allowance was made to mothers because it hampered them in the economic struggle, and that when the subsidy was withdrawn, the mother would have to go out to work, and would not be in a position to suckle the children?—Perhaps that may be the explanation.

17. Then it does not follow that it is a lack of affection?—Put it in this way: When you pay a mother for the discharge of her duty she is less likely to discharge that duty afterwards.

18. In your comparison between England and France in the eighteenth century—I am speaking subject to correction—the armies were not conscript armies, and therefore the

size of the armies, if they were mercenary armies, was no indication of the relative size of the population behind those armies?—No, but each nation used the best means of carrying on the war, and the English nation, one-third of the size, had the best of the argument.

19. The British Army might use a larger proportion in the war than the French, and therefore the size of the actual population might not bear on the success of the English over the French?—Surely each nation used the weapon it thought most suitable? The French at the end of the eighteenth century did have conscription.

20. Were there no other causes, such as the insular position of this country?—I agree. There were also other differences between the two countries. The French had a large poor population, but we had a smaller, but a richer, population.

21. You talk of the population of England, but what about Canada, with two people to the square mile, and some parts of Australia, with one person to one square mile? If we hold these territories, are we not bound to develop and populate them?—I am very keen on emigration, but I do not think that it would suffice to settle the problem. I think you have got too many people to the square mile in London and other big places at present.

22. You would prefer a highly developed small population to a large population not so highly developed?—Yes, it is quality that is important and not quantity.

23. Have you any figure to give us as to what family you would consider to be the maximum?—No.

24. We have had evidence to indicate that in order to maintain the population a family should consist of about four?—I want the population reduced; I think it is too big.

25. DR. ROUTH. But you won't give a figure?—The chairman gives us a figure that would maintain the population, and I want to see the population reduced.

26. SIR RIDER HAGGARD. Do you consider the suffering of a mother with several children who loses one child is equal to the suffering of the mother of an only son when she loses him? If one son is lost, and there is a large family, there is something, but if an only son is lost there is nothing.—You mean that a woman with twelve children is comparatively indifferent to the loss of one?

27. No, I never said so. You will have noticed in the late war how frequently in the announcements you saw "the only son of." Don't you think that a very evil state of affairs?—I think it is one of the horrors of war.

28. And yet if you cut down procreation so much it must have an influence?—You are only proposing to kill more people, by breeding more to be killed.

29. I cannot accept that, because I am not proposing to kill anybody. When you talk of married life as one long disease for some women, what is the exact meaning you put upon the word?—Where women have a considerable number of children in rapid succession, born under more or less unpleasant conditions.

30. In the present war, what would have happened to France if it had not been for us?—She would have been beaten.

31. Why?—Because she had fewer reserves in men, material and money.

32. You will admit that France, had it not been for our assistance, would have been destroyed by the superiority of the Germans?—Yes.

33. Then you talk of breeding children merely for destruction on the battlefield. Is the battlefield in the future an inevitable thing?—I think war will always go on.

34. Surely then we must breed men or go under?—Not at all. We shall do in the future what we have done now—we shall make alliances of the higher races to combat the militant races.

35. You as an Englishman would not be content to risk the safety of your country on future alliances?—My answer is that it is the only way. If we engage in a cradle race we shall be beaten, because the Germans start with a larger volume.

36. We hold one-fourth of the earth with sixty million white people?—Yes, there are fewer people in Canada than there are in Greater London.

37. In Australia there are not more than two-thirds of the population of London, of which one-half is crowded into three or four cities. I believe that in China there is a state of chronic starvation, that they are all brave men, and are now being educated to arms and the manufacture of munitions. That being the case, and having a huge country near by which could accommodate hundreds of millions of them, is there not the perfectly natural inference to be drawn that some day they will wish to occupy that country, and that possibly within a generation or two, seeing the rapidity with which the Japanese have advanced?—Quite possible.

38. Under the circumstances, is it not almost a sacred duty of the white races to see to the population of the

country?—What practical scheme do you propose? that is the point. I think it is most important that a large part of the population of England and Wales should be moved to Australia and Canada.

39. If you advise the reduction of our population by the use of contraceptives, how can there be any to move?—The answer the Colonies would give us is, "We don't want your slum population."

40. PROFESSOR GOLLANCZ. With regard to what you said about the Jews, they do consider it wrong not to have a child—the strict law requires one son and one daughter at least. That is the strict letter, but the spirit of the law requires more children. It is really considered sinful, according to the strict Jewish law, to limit the family.—That was my opinion; so it is in India, in China, and a great many parts of the world.

41. I know of several cases where it would have been bitter mental suffering for a woman not to have one child at least, because one sees cases where, there being no children, women have lost their reason.—My point is, that it is better to have ten women with one child each than for one woman to have ten children.

42. DR. STEVENSON. I don't think you quite mean what you say in regard to the alternatives you give when you say: "The rate at which any population increases can only be reduced in one of two ways—either by reducing the birth-rate or by expanding the death-rate." There is the third way, by increasing emigration?—There are limits to emigration.

43. Certainly, but I wonder why it is impossible for us to emigrate to the desired extent? One sees how the population of Ireland declined as the result of emigration, so why should not the population of England be affected to any desired extent?—The Irish population increased at an enormous rate between 1800 and 1840. That was due partly to the potato, and partly to the creation of freeholders for political purposes. When the potato famine came the surplus had to emigrate. Our big population in England, though I do not know whether people realise it, is really due to machinery.

44. I wanted to get at what was the reason against effective emigration?—It is difficult to get people to move.

45. There are two ways of getting them to move—either by things becoming more disagreeable here, or making them more agreeable on the other side. The Government could do one thing and the States abroad do the other?—That

is why it would be much better for our Government to spend money in the Colonies for housing rather than in this country.

46. I understand you to say that you think high child mortality is necessarily coincident with high fertility?—Almost invariably. There are a few cases where it is not so, but they are exceptional.

47. LT.-COLONEL FREEMANTLE. You say you wished to see the idea of birth control spread to all countries. I suppose you have no hope of seeing that sort of thing, say in India or China?—I think missionaries in India or China should make the advocacy of birth control one of their primary duties.

48. Is it possible to expect any increase of birth control among the masses of India and China, say for the next century?—Possibly not. Nature settles the births by increasing the deaths. The mortality is enormous.

49. In other words, you advocate birth control propaganda in order definitely to reduce the birth-rate throughout the world?—In this country, you would have an average improvement in quality if the inferior classes ceased to breed—I speak of the inferior classes physically.

50. Take the drunken casual and the least educated classes; have you much hope of getting them to use birth control?—They are less likely to do so if the State makes it easy for people to have children without the responsibility of having to bring them up.

51. If you double the ordinary population, have you probably not got a better choice of a Prime Minister or an Archbishop of Canterbury?—Not necessarily.

52. MGR. BROWN. You speak of women suffering from excessive procreation?—That is the pre- and post-troubles of parturition.

53. I have heard that with the restriction of procreation has come excessive sexual relations, and that is harder for many women to bear?—That is a new point to me; I should think it would depend upon the woman.

54. MISS MICHELMORE. Do you agree with a rebate in income tax for each child? Do you think that is a State subsidy?—No, I don't think it is. It proceeds from an entirely different point of view, the idea being to make taxation as equal as possible. The State might argue that the bachelor can afford to pay more taxes than the married man.

55. You say, "Children begotten and reared by parents who are subsidised by the State for performing the duties of parenthood will probably be content to lounge through life leaning on the State." Have you any evidence to give

on that point?—No, it is a natural deduction from my elementary knowledge of human nature.

56. Do you think that if their conditions could be made better that parents would lounge through life? What I mean by "lounging through life" is accepting everything given and doing nothing in return.—If you breed them up to receiving a subsidy for perfectly natural duties you are likely to get people of the lounging type.

57. DR. ROUTH. I suppose these "doubling the population" figures are the numbers given in the census, or is it the natural increase added?—I am taking the difference between the figures of 1801 and 1851?

58. And so there must be added the number who have emigrated?—Oh yes. I can give the emigration figures roughly for the ten years of this century: I think it was about half a million.

59. As regards alternatives to birth control, I think that discussion has shown that emigration is one of the possible alternatives to massacre. I suggest that lactation would space out the children. Given nine months' gestation and six months' lactation, would it make any excessive rate impossible?—Can you compel a woman to feed her child?

60. I am speaking of it as a means of spacing out the children?—That is birth control.

61. It is a physiological function, but you advocate something which is unnatural. You suggest sheaths, letters and so on, instead of allowing nature to take her ordinary course. I say we should educate people in the natural process and not in the unnatural?—It is not enough.

62. You propose that the Government or the educational authority is going to enlighten the population in these birth control methods?—I don't suggest that the Government should do it.

63. Then who is to do it?—There are plenty of people to do it. It is being done now, and would be done still more if people were not afraid of prosecution.

64. Don't you recognise that these methods are harmful? A large majority of the means, especially the very common one of withdrawal, are doing more harm to the country than anything else, even alcohol, I believe?—I think it is a matter of opinion, but I am not a medical man.

65. The matter of withdrawal, to women especially, is the most harmful of all the means of prevention. Then are you conscious, supposing this knowledge was spread abroad, and it was known that there could be sexual intercourse without the natural result of conception, that it

would lead to immorality in unmarried women and men?—It may, but you don't suggest that that does not exist already?

66. Certainly not, but it is not as safe as it is stated to be. I know heaps of women patients who have come to me, who have had connection and adopted means that they considered safe, and yet they are pregnant?—That shows that the evil you anticipate is not likely to occur.

Twenty-Second Day

Friday, June 13, 1919

Principal A. E. Garvie, M.A., D.D., in the Chair

Statement of Professor Leonard Hill, F.R.S.

The Chief Medical Officer of the Board of Education reports that not less than a million children of school age are so physically or mentally defective as to be unable to derive reasonable benefit from the education the State provides. In Finsbury, he says, the death-rate of infants varied from 41 to 375 in the sub-areas, the death-rate being highest where there was the highest percentage of poor class tenements and a low standard of social life. Dr. John Brownlee finds there is sixteen years' difference between the expectation of life at birth in a big city and the healthiest districts. At the age of five the difference is eleven and a half years. Twenty-one per cent. of children in county boroughs of the north die before the fifth year, and nine per cent. in rural districts of the south. Between the ages of forty and fifty the death-rate in the unhealthiest districts is two to three times greater than in the healthiest, although there has been a general improvement of health. The relation between density of population and mortality established many years ago by Dr. Farr has not been altered by improved sanitation, by good drainage, pure water supply, etc. Taking averages over large areas, the death-rate varies as the tenth root of the density of population, and this relation remained constant from 1881 to 1900 (J. Brownlee). At least a million recruits, said the Prime Minister, were found unfit for military service. The high mortality of children is due to excess of respiratory and alimentary diseases, particularly of the latter. While proper feeding is of paramount importance, two factors

must be considered: (1) the right choice of food; (2) the need for food set up by the expenditure of bodily energy. The cooling and evaporative powers of the air are closely connected with the causes of high infant mortality, these acting both on the skin and respiratory membrane. Cool, moving air is the natural stimulus to activity and appetite, to deep breathing, active circulation, thorough oxygenation and good digestion. Cool air has a very low vapour tension compared with warm, humid air, and, when breathed, promotes evaporation from, and flow of blood and lymph through, the respiratory membrane, the natural defences against infection. It suffices to state here that the weight of water vapour held in each cubic metre of saturated air is: at 32° F. five grammes; 60° F. thirteen grammes; 77° F. twenty-three grammes; 100° F. forty-five grammes. When cool air of low vapour tension is breathed, the respiratory membrane keeps itself nearly at body temperature, and moist, by the flow of arterial blood and secretion. Exercise increases the breathing volume some five times, and the flow of arterial blood and secretion through the membrane proportionately. I estimate a man camping out-of-doors in cool weather, and taking several hours' hard exercise, may have almost a ten times greater flow of blood and secretion through his respiratory membrane than one living in a warm, humid tenement. In the latter the infection from dust and saliva spray from "carriers" of disease is very great; in the former nil. Physiological research has proved conclusively that, apart from the spread of infection by "carriers," it is not the chemical impurity, but the physical conditions of close air which make for discomfort and impoverish health. It is not excess of carbonic acid, nor lack of oxygen, nor the presence of organic impurities which affect us in a crowded room, but the heat and moisture of the air. The victims of the Black Hole of Calcutta died not of suffocation, but of heat-stroke. I have introduced an instrument, the kata-thermometer, by means of which there can be measured the cooling and evaporative powers of the air exerted on a surface at body temperature, the measurements being expressed in units of heat loss per square centimetre per second. A very wide series of observations have shown me that the cooling and evaporative powers in rooms commonly approximate to those in tropical humid climates, so admittedly enervating to man. This is due chiefly to the stillness of the atmosphere. Exposure to wind has a most potent influence on the cooling and evaporative powers, an influence which

the thermometer (wet and dry) fails to indicate. The thermometer is, then, a most indifferent instrument for estimating efficiency of ventilation. The dry kata cooling power (cooling by convection and radiation) averages about six, and the wet kata cooling power (cooling by convection, radiation and evaporation) about eighteen in ordinary rooms. In warm, humid rooms the figures may be as low as three and twelve. In Sierra Leone, out-of-doors, exposed to the wind, the mean monthly dry kata reading varies from seven to twelve, the wet kata from nineteen to twenty-six. In the ideal weather of last May, out-of-doors, in the sheltered courtyard of the Museum at Lincoln, the dry kata readings at 9 a.m. varied from nine to seventeen, the wet kata from nineteen to thirty-three. Fully exposed to the wind the mean monthly dry kata cooling power in England is over twenty in summer, and over forty in winter, the wet kata forty-two and sixty-seven—against dry kata six and wet kata eighteen indoors. The open-air workers and agriculturalists, fishermen, etc., are then exposed to far greater cooling and evaporative powers than citizens who dwell in tenements, travel in crowded conveyances, work in schoolrooms or factories, eat in canteens, seek amusements in cinemas. It is the lack of windage which largely explains the correlation between density of population and high morbidity and mortality. The tenement baby, overclothed and confined indoors by the mother—for fear of its catching cold, and to save trouble under the difficulties of tenement life—dies from digestive, nutritive, and respiratory troubles, brought on largely by lack of adequate cooling and evaporative powers of the air. It is surrounded with a tropical, still, humid atmosphere. Nothing is done to secure the natural massage of its belly organs by outdoor exercise and the deeper breathing excited thereby, to maintain the capillary venous circulation by the pumping action of the muscles during such exercise, and by the hard tone of the body which results from such exercise to stimulate combustion of food, and a full utilisation of the products of digestion, and so a clean bowel and keen appetite which will secure enough of the many rarer "building-stones" required in the food for growth and health. The depression of metabolism and the want of fresh natural foods, grass-fed milk and butter, succulent fresh young garden produce alike result from the present city conditions, and these together are the causes of "deficiency" diseases, such as scurvy and rickets, with the decay of teeth and an enormous amount of ill-health which is not actually identified as

disease. In Glasgow something like fifty per cent. of the children of the poor suffer from rickets, and fifty per cent. of the population live in tenements. In garden cities there is very little rickets. Eighty to ninety per cent. of the school children of the L.C.C. suffer from decay of the teeth. The metabolism of a healthy individual is increased, I find, one hundred to two hundred per cent. by mere exposure (sitting still in ordinary light clothing) to cooling winds. There is, on the other hand, evidence that the breast-fed slum baby takes a remarkably small amount of milk (Eric Pritchard). When artificially fed, it is over-fed, and in warm weather with contaminated milk: the over-feeding with dirty milk brings about fatal diarrhœa. It sweats in the tenement atmosphere, and is given milk when it wants water. The older children receive a diet deficient in vitamines present in natural fresh foods, receiving in place of these separated products of the miller and refiner, white flour, sugar, vegetable oil margarine, and canned foods in which anti-scorbutic vitamines are destroyed by cooking. It is open air and exercise, good feeding and well-regulated rest which have converted weedy citizens into robust soldiers, which restore the weakly in open-air schools, and the consumptive in sanatoria. Preventible sickness is maiming and killing as many, and causing economic loss as much as the late War. Garden cities should, then, be built and big towns not added to. The Government should choose new sites with beautiful surroundings, and with all the conditions that favour a happy and healthy life. The whole question should be gone into as boldly and as thoroughly as we had faced the war. That was the only way to get better conditions, and it was the one way to escape the perils which had overtaken Russia. An immediate and pressing demand should be made for garden cities, and the bringing up of the young in the discipline of taking pride in and keeping perfect bodily health. The present system of national education weakens the vigour and lessens the happiness of the nation. It is imperative that all children should receive the education that public school boys obtain on the playing-fields.

In submitting the précis Dr. Hill said: I have put some statistics together showing the effect of the present conditions of housing and of big city life. Dr. Brownlee, in his recent paper to the Statistical Society, gives very striking figures showing the expectation of life. I think it is certain that although we have improved the expectation of life of children a good deal in the last few years, we have done

nothing to extend life at the other end. The expectation of life at fifty is not greater than it was some decades ago. While health has been improved all round, the relation between density of population and mortality established many years ago by Dr. Farr has not been altered by improved sanitation, good drainage, water supply, etc. There were a million recruits unfit for military service, as the Prime Minister tells us, and in some trades there were, among the people over forty, more than one-half unfit for service at that age. The high mortality of children is, as is well known, due to excessive respiratory and alimentary diseases. I want to point out that two physiological facts must be considered: one is the right choice of food, and the other is the need for food set up by the expenditure of bodily energy. Big city life, I think, is telling in two ways: mainly, because there are no gardens in which fresh green foods can be grown containing vitamines. There are water soluble vitamines which prevent scurvy and beri-beri, and vitamines soluble in fats which prevent rickets. The latter are present in milk and butter from grass-fed cattle, but not in vegetable oil margarine. They are present in oils taken from glandular tissues, in dripping, but not in lard. All the vitamines are present in fresh salads and greens. The conditions which have sprung up in England in the last hundred years or so have separated people from the gardens and the growing of those things, and a deficiency has naturally sprung up of these vitamines, or, as the physiologist prefers to call them, the "accessory food factors," and the miller, the refiner, and the canner have helped get rid of these things. There has been great and increasing poverty in these foods, and we are attributing the general malnutrition and early death of people in big cities largely to wrong diet. It has been shown by Miss Fergusson and Professor Noel Paton that fifty per cent. of the children of the poor in Glasgow suffer from rickets, and that fifty per cent. of the people there live in tenements. In garden cities like Port Sunlight and Bournville there is very little rickets. Another thing I would like to lay stress upon is that the city environment reduces the need for food. The great thing to do is to get a big turn-over; to run up the vital energy at a high rate and make the fire of life burn brightly. That is done by open-air exercise. Upon the cooling and evaporating powers of open air I lay the great stress. The body is cooled and exercise is taken to get warm; that means that the ventilation of the lungs, oxygenation of the tissues, the circulation of the blood

and the massage of the belly organs are greatly increased, which is of profound importance to the human body. The wild animal lives and takes exercise in the open air, and keeps its body in perfect condition. The vapour that is taken up from the skin or the lungs depends upon the absolute humidity of the air. The air we breathe is heated almost to body temperature, and it is saturated with water at body temperature. A cubic metre of cold air, at freezing temperature, will hold about five grammes of water, and when heated to body temperature it will hold something like forty grammes of water. If you take exercise in the cool open air and increase the depth of breathing by doing so five times you very greatly increase the loss of water from the respiratory membrane, and at the same time that air has got to be heated up to body temperature. In my opinion the membrane is kept healthy by the amount of arterial blood which is flowing through the membrane and the amount of secretion which flows out from it and keeps it clean. The higher the evaporation the more water will have to flow from the membrane, and the more blood will have to come in to keep up the evaporation; at the same time, the cooler the air the more blood will have to go through the membrane to keep it warm. I have concluded that in the case of a Boy Scout camping out-of-doors and taking hard exercise in cool air, it would be quite possible for the water evaporated from, and blood sent through, his respiratory membrane to be ten times as great as it would be if he were in a tenement and school all day, where the air is warm and close. If you think of the washing and cleaning-up mechanism of the respiratory membrane being increased from five to ten times, that is a very important fact. The open-air life will not protect us from world-wide infection like influenza, but it does keep people free from pneumonia and ordinary colds and sore throats. Soldiers are extraordinarily free from them; so are agricultural labourers and the like. There are two things to be remembered in this connection: the "spraying out" of infection is greatest in tenements, and there is a reduction in the resisting capacities there. That is the explanation, I think, of the enormous amount of respiratory disease in the tenements. Infantile diarrhœa, too, I would associate very largely with the tenements' conditions. I find that sitting in my own garden, in cool, moving air, the metabolism may be raised one hundred to two hundred per cent. If the cold makes you run about it would be more. The metabolism of the native students of Singapore is less than half that

of an Oxford student. I have invented an instrument, known as the "kata-thermometer," which measures the cooling and evaporative power of the air on a surface at body temperature. It is a simple instrument, easy to use. This instrument shows that we are living indoors in a climate which has the same physiological effects as the climates of Sierra Leone, Ceylon, Madras, Singapore and humid, tropical places out-of-doors. If you take the case of a baby cradled in a stuffy tenement the climate is worse. The appetite of such a child goes down, and it does not get enough protein "building-stones" and vitamines. If artificially fed by a bottle it gets too much food. The tenement child seems to get a very low amount of mother's milk—an amount suited to its warm environment, as shown by Dr. Pritchard's figures. As the child naturally fed does not get too much milk, it escapes diarrhœa. The child artificially fed gets too much; when thirsty, owing to the heated atmosphere, it is given food in place of water, and thus gets its bowel loaded with food it does not want. At the same time, cows' milk is infected with bacteria in the tenement air, and you get contaminated milk put into the bowel and not absorbed, so that it undergoes bacteriological decomposition in the bowel, and trouble is set up. An enormous deal can be done, not only by attending to the milk, but by seeing that the child gets fresh air—twice a day stripped naked and bathed, and allowed to play for a time quite naked, and have its body stimulated as the wild animal's body is stimulated. Of course, the treatment by open air and exercise is difficult unless we get garden cities. The rebuilding of industrial areas as garden cities will solve the health question. I say that the duty of the nation at the present time is to rebuild industrial areas; to just as boldly carry that out as it carried out the war. Our consenting to the present conditions of housing is producing a higher death-rate from illness and a far greater loss due to inefficiency than ever the war did year by year. Build new factories and garden cities in areas chosen for the advantages they offer the people. People should be taken out of the present cities, and in that way, I think, we can recover the health and virility of England, but I do not see that it can be done in any other way.

1. THE CHAIRMAN. You will agree that healthier motherhood can be secured under the conditions you speak of?—Yes.

2. You would not object, would you, to answer questions beyond the immediate content of your paper? We here

are very specially interested in birth control, and you would not object if a member of the Commission addressed you a question on the subject?—Not at all; I am here as a physiologist to answer any question I can.

3. Dr. Mary Scharlieb. I suppose that besides all that you said about the high infantile mortality you will admit that there are other causes—for instance, infantile syphilis?—Certainly.

4. Don't you think it is rather a loss to us that so far the Registrar-General has put various diseases—pre-maturity, malnutrition, and so on—together? They do not differentiate the cause of all these things, though they are not in themselves entities, but the result of various other causes?—Yes. I would point out, at the same time, that pre-natal causes are productive of far less infant mortality than post-natal causes such as I have dealt with.

5. Colonel Bond. I would like to ask, in regard to the importance of organic impurities in the air, whether Dr. Hill thinks the recent experiences in regard to the use of oxygen chambers at Stoke-on-Trent, in which organic impurities seem to accumulate in such a way as to produce very definite results: whether that has altered his opinion in any way?—No, because I know that in that chamber the air has been almost still, and the cooling and evaporative powers have been kept too low.

6. The importance of grass-fed milk seems rather a striking point, and one would like to know whether the value of milk from store-fed cattle, if fed on turnips, and so on, would be equally as good as the grass-fed?—I think so, unless the turnips were old; these things go off with keeping.

7. Dr. Routh. Have you any experience of the methods of artificially preventing conception? I imagine you disapprove of these?—Any interference with the physiological act of copulation is bad, but people are faced with a choice of evils.

8. You think a great deal of the cause of rickets is as you suggest here?—I do, but I think we want more experimental proof. Professor Noel Paton has done some experiments on puppies kept either in the laboratory or at a country stable. I am now keeping puppies, some in a small chamber, where the air is still and warm, and some in a shed, where plenty of air and exercise can be had.

9. You lay it down that, in addition to fresh air, exercise is of the utmost importance?—Yes.

10. The treatment for tubercular patients is that they should rest in the open air, rather than exercise?—The

diseased lung wants rest—to be kept still, like a splinted joint. That is why patients are kept at rest when the disease is active. My own boy had a lung diseased. He had a high temperature and much cough, but after the lung was shut up and put to rest by the modern treatment of producing an artificial pneumothorax, the whole of the fever and the cough went. He is now walking about, taking exercise, and so on. The exercise has an excellent effect on him so long as it does not cause the expansion and tearing of his diseased lung.

11. Now, as to the effect on the individual of birth control, as it is called—the methods of preventing conception. Can you give us any evidence of the ill effects or otherwise of these methods?—The view I should take is that women vary much; and it is particularly women who are affected by these methods. There are women born with a very strong maternal instinct, and there are others born with a very small instinct for maternity, perhaps none at all. One knows that each sex has the rudimentary glands of the other sex, and that the presence of these things may modify the nature of people. I should say that for women who have a very strong maternal instinct, to stop them having children by artificial means is bad. Some observations that I have made substantiate that view. It is bad for both sexes to marry and have no children, but worse for the woman who has a strong instinct for maternity. On the other hand, I admit the enormous difficulties that come under one's notice. I recall the tenement life. We have eight million people living in tenements, I believe. What sort of a life is that to bring children into? We come back to the question of garden cities, and the colonies. There are vast areas in the colonies waiting to be populated by the English people. I say, get the people into conditions in which children can be brought up well and happily.

12. You prefer, rather, that with a larger population like England has, instead of restricting the birth-rate, one should encourage the cultivation of the open-air life?—Yes. When a child is shut up in a tenement, three or four floors up, and kept cradled in a mass of clothes, I do not call that life. It is the negation of life. It is much better to be a wild animal to fight for life than to live like that.

13. THE DUCHESS OF MARLBOROUGH. You would make out a specially strong case for the open-air school, and would suggest that the new schools should be made on that line for the ordinary children as well as the defective?—Certainly. I think that the discipline of the open-air school

wants to be applied to the whole body of children. It has been proved that all classes of delicate children immediately respond to, and become enormously benefited by, the open-air school. The child happy enough to commit some crime gets this treatment in training-ships, etc., but why it should not be applied to those who are not naughty and not ill is the most extraordinary thing. In New York they have now one hundred and twenty open-air schools, against two in London. We are saving pennies in not putting up these schools, and wasting hundreds of pounds in ill-health and efficiency of our religion.

14. Lt.-Colonel Freemantle. Do I understand your evidence here is only as regards the question of infant mortality, not the birth-rate, or has it a direct bearing on the birth-rate?—There is a great deal of evidence, but it is very indefinite evidence, that these close conditions are reducing fertility.

15. Have you considered whether the reduction of the birth-rate is natural as well as artificial?—Yes, I think that there is a gradual loss of fertility going on without the use of artificial means. The confined conditions of city life lessen the fertility. There is evidence of that in cattle. I have come across American evidence that stall life and feeding is reducing the fertility of cattle. I read in a report of the American Agricultural Department that that is well recognised by cattle breeders.

16. I would like to ask on one other point: whether you think there is any reduction in fertility as the result of the use of preventive methods, or whether your reply to Dr. Routh was as to the indirect?—I think it is due to the methods used, but quite apart from these methods—which I should say are largely used by the middle classes—there is a reduction.

17. With regard to the methods of prevention, would you say that some are more harmful and some are less harmful? —Yes, I should.

18. Which would you say was the least harmful: syringing, the use of quinine pessaries, or the use of the sheath?—I should say that the least interference with the physiological act would be the least harmful to the nervous system, and probably, therefore, the use of pessaries would be the least harmful of measures taken at the time or before the act. Still better is the use of a vaginal douche next morning, which, a gynæcologist tells me, very rarely fails to prevent conception.

19. Dr. Routh. That is to say, that withdrawal would

be the worst?—Yes, and the use of a sheath is a serious matter to a woman, as it occasions failure to complete the normal act. There are natures in which it would have no effect, and in other natures it would have a disastrous effect.

20. Miss Broome. Will you tell us the best methods of ventilating schools healthily?—That is a very big order. I think you have to put the ideal outdoor conditions before you first, the radiant heat of the sun, a cool breeze and warm ground. I believe in radiant heat, such as afforded by the modern gas fire; with this to warm at one can stand cold air and open windows. Steam radiators that put out a very moderate degree of radiant heat and heat the air make the conditions close.

21. Do you think that schools would be better with electric fans, so that there was constant movement there?—Everything should be done to keep air moving. Just now, there are two large firms that have come to me with exactly the same problem. They have each magnificent new acre-big factories, in which they seem to have done everything, but their workpeople suffer from lassitude and become "fed up" with their occupation. They suffer from "a greenhouse" atmosphere; the air in these big factories is windless and enervating.

22. Ought we to have your kata-thermometer in every school? Would it be of any use?—Yes, and it would be of great use to me to get your records. To use the instrument it wants a little trouble and care. The stem is graded from 95° to 100° F. The bulb is put in hot water until the meniscus rises above 100° F., then dried and allowed to cool. The time of cooling is taken, and by means of a factor this can be converted into a cooling power expressed in units of heat per square centimetre per second. A muslin glove is then put on and a wet reading taken. The dry reading gives the cooling power by radiation and convection, the wet by radiation, convection and evaporation.

23. We believe in open-air schools, but we are afraid that it will be very long before they become universal. If any campaign were started by any person to advocate smaller classes in all cases, that would have a great deal to do with improved health?—Yes.

24. Where you get a room built for forty crowded with sixty you cannot expect anything but ill-health?—That course increases all the bad conditions.

25. Are you in favour of segregating the individual?—The difficulty is to choose them.

26. There are some that are so obvious. All these children that Dr. Newman speaks of when he says there are a million unfit children in the schools—they are the production of unfit fathers?—Many are the product of bad post-natal conditions and infectious diseases. Would you segregate the unfit in schools or for life?

27. For life, those that are so apparently unfit which everybody knows?—I think this question, just like the question of a doctor putting an end to a man who is fatally ill and is suffering great pain, raises such extraordinary difficulties, and may lead to such abuses, that it is too dangerous to say yes. People might segregate the fit and call them unfit.

28. Dr. Sullivan. One question with regard to the deficiency of these vitamines in certain food. Should there not be some Government authority for guaranteeing the purity of food supplies? I am thinking of the very large use of margarine deficient in vitamines. Ought there not to be some valuable results given by the Medical Research Committee, so that it would lead to practical gain in some direction? It does not become known to the general public. Ought there not to be some Government guarantee of the quality and nutritive value of some of these foods?—I feel that very strongly. I think that the crying need of research nowadays is to get in touch with popular opinion, and work on it and influence it on these matters. There always has been far too much divorce between physiological science and popular expression of opinion in these matters. During the last hundred years, while people have been shifted into these tenement cities, nothing has been done to point out what is happening in regard to sophisticating foods. It should be made known that while white flour may be good for baking, a child cannot be brought up on white flour, tea and thin fruit syrup, called jam.

29. Miss Michelmore. Have you any limit as to the size of your cities; is there a limit to the number per acre?—If I were top dog in this country I would enact that there should not be more than eight houses to the acre in thirty years' time.

30. Might not the strain of circumstances have its effect?—Yes, the nervous strain of the factory worker has an enormous influence, but that, I think, is compensated if you get out after factory hours into playing-fields, but if you get in crowded tubes and go to crowded tea-shops and cinemas, and finally sleep in a crowded tenement, you are in a close tropical climate all day long.

31. Dr. Stopes. May we have your opinion on boiled

milk? I think we have in this country a very wide opinion that milk should be boiled?—Dried milk has done good deeds in the tenements.

32. But dried milk is dried under 60° C., and boiled milk is heated much over that. It seems only a few years ago we did not know anything about vitamines, so don't you think it is rather presumptuous that we should profess to know a large amount about milk?—Certainly, but experience has shown that with autoclaved milk and white bread, plus orange or swede juice, animals can be kept in perfect health, but without orange or swede juices they get scurvy.

33. You spoke of a natural wild baby. Will you tell us where to find that?—I can tell you of the Terra del Fuegian child, mentioned by Darwin, naked at the breast of its naked mother, in a sleet shower. And the Terra del Fuegians have to commit infanticide to keep the population down to the food supply. I would bring to your notice Lieut. Muller's baby, a really wonderful baby. It was brought up from birth with massage and open air, stripped naked for some time each day, bathed and played with, and exercised right up from birth; beginning, of course, with massage, and then going on to various exercises. That child is entirely different to the flabby big things we see in the advertisements of infant foods. He is like an ancient Viking.

34. Dr. Pritchard. You suggested that if the quantity of food were reduced to a minimum amount, the vitamines would be reduced to a really seriously dangerous level, simply owing to the fact of the small total amount of food. I think that idea is that there should be a relationship between the amount of food consumed and the vitamines consumed, and that if you reduce the one you reduce the other?—I quite agree there is some evidence to show that it depends upon the amount of food eaten how much of these vitamines are wanted. But if the vitamines are deficient in the food, and there is a reduction of the metabolism, it might turn the balance. There is, too, the question of the amino-acids, the building-stones of the proteins; some of these may be deficient if the metabolism is reduced by over warm environment and want of exercise.

35. In connection with this fat soluble vitamine. It seems to me at the present time there is great danger of our running amuck over this question, because the idea is gaining considerable credence, that rickets is due to this. I have been studying this question for twenty years, and I began my study with a very fat child which was fed very

largely on the individual milk of a Jersey cow. Yet the case was a typical one of rickets. My own view is that this fat soluble vitamine is necessary for nutrition, but I think it is the greatest danger of the moment if you think that if you only feed that child with a few grains of cod-liver oil you will prevent rickets.—I quite agree that these things should not be pressed too far. But the evidence brought forward about rickets is very striking, and one would like to know how the Jersey cow was fed: did it get enough fat soluble vitamine in its food, or was its milk deficient in this, although rich in fat? In regard to the education of mothers in the habit of giving infants open air and exercise, this, I admit, may be done successfully, but the big city life will continue to take its toll of the children and grown-ups. A strictly disciplined life may overcome the ill effects of the city conditions, but garden cities offer natural incentives to a healthy life and freedom from such strict discipline which would be most difficult to enforce.

36. Do you not think it possible that the use of quinine pessaries, which are made of cocoa butter, if they gain admission into the uterus, and even possibly into the Fallopian tubes, that that may be a material cause of want of conception? They are very much used in the better class families. I know a very large number of cases that use them, and in a very large number of them permanent sterility followed.—I think it could easily be put to the test. Microscopical examination of the Fallopian tubes of women known to have used such, or a test made on monkeys, would soon settle the point. With regard to sterility, if women marry late they are less likely to have children than at an earlier period. It may be that when the physiological call on the part of the organs is not carried out sterility results.

37. Sir Edward Brabrook. Quoting, I think, from Dr. Brownlee, you say, "The relation between density of population and mortality, established many years ago by Dr. Farr, has not been altered by improved sanitation, by good drainage, pure water supply," and so on. I dare say that is correct relatively, but is it correct absolutely? Don't we live longer than people did sixty years ago?—I have put in the following words: "Although there has been a general improvement of health," the relation, etc. The expectation of life of the young has been extended notably, but not that of the man of fifty.

Further Statement sent in by PROF. LEONARD HILL, F.R.S.

THE following conclusions are taken from a research by R. McCarrisen on the pathological condition known as "beri-beri" produced in figures. Beri-beri results, as is well known, from a diet of polished rice or from one of white flour, as was shown by Mr. Flack and myself, and the absence of accessory food factors leads to functional and degenerative changes in every organ and tissue of the body, and renders the body very liable to be overrun by the rank growth of bacteria.

Profound atropy of the reproductive organs is a consequence, leading to the cessation of the functions of spermatagenesis.

In the human subject such degrees of atrophy (as found in the experimental animals) would result in sterility in males and in amenarrhœa and sterility in females; hence probably "War Amenarrhœa" arose. (Robert McCarrisen, "The Pathogenesis of Deficiency Disease," *Indian Jour. Med. Res.*, 1919, VI. 275.)

In the case of ship "beri-beri" stokers frequently suffer more than deck hands. This shows, I think, the effect of bad heat stagnation in lessening metabolism and so helping to bring about deficiency disease.

There is evidence that European women age early and become barren in the tropics.

Thus Sir Harry Johnston says, "In Jamaica the white birth-rate is small, partly owing to there being many bachelors among the whites, and partly to the tendency of white women to bear fewer children" (*The Negro in the New World*, 1910).

I suggest the tropical indoor climate of our cities may be having the same effect on women. Castellani and Chalmers in their book on *Tropical Medicine*, say: "Men who spend much time actively engaged out-of-doors are the ones who remain in the best health. Those who suffer most from nervous affections are the women, and they practically pass all their time in the shade."

Dr. M. Culpin, who spent some years in tropical Northern Australia, told me the same thing, the women suffer in health and lose their fertility.

The following citations are from Bulletin 330, Ohio Agricultural Experiment Station:—

"There is general agreement that sterility is common among milch cows, wherever large numbers of them are brought together in an intensive programme of feeding,

breeding and milk production, and that this failure to breed is becoming more prevalent. Much current opinion attributes this failure to contagious abortion alone, but others, who are considered as competent to judge of the facts, are positive that a large proportion of the cases of sterility must be due to the operation of some other important and unexplained factor. It is reported, on the best authority, that whole herds will fail to breed, during a limited period, apparently because of their state of nutrition, there being no indication of contagious abortion. There is a widely prevalent belief that failure to breed is decidedly common, though by no means invariable, after especially heavy and protracted milk production."

It is also the prevailing opinion that the higher the dairy development of the cow the more frequently will there be difficulty in getting her to conceive—that this is the effect of the combination of intensive milk production, heavy feeding and the restraints of an unnatural environment. The delayed breeding of the heavy producer is thought to be a factor, especially when cows are fed to obtain records of sustained production.

It is generally understood that gross over-feeding, over-allowance of protein, or any marked lack of balance in the ration due to excessive proportion of certain feeds, may cause abortion and temporary or permanent sterility; any general injury of forage crops which results in loss of vitality in the cattle as like consequences. Food shortage and other hardships are followed by increases of sterility and abortion.

Farmers are advised to build up the mineral reserves of their cattle by growing them largely on leguminous ranghage or a pasture containing an abundance of legumes, and allowing them exercise, as much as they incline to take. Muscular activity increases the avidity of bone-cells for mineral salts. The production of mineral salts in milk puts a drain on the mineral salts of the bones, and this has to be made good and the farmer must then get the soil into a high state of fertility, using fertilisers containing calcium and phosphorus, and grow plenty of legumes.

The dependence of the skeletal development of live stock on the composition of the forage, and of the latter on the composition of the soil, is recognised by stock farmers.

The prime quality of Aberdeen beef is attributed to the characters of the soil on which it is raised.

The feeding of horses on two experimental farms located on different types of soil affects the skeletal development (Kisaku Kitta, Japan). It has been suggested that the

character of sheep (breed) and wool in Britain is determined by the soil.

E. W. Murphy describes the prevention in Victoria of the related disorders in stock—rickets, cripples and paralysis—by the improvement of forage with artificial fertilisers.

Malnutrition of the bones of cattle is found in the U.S.A. in regions of infertile soil, worn and insufficiently fertilised. It may also be caused by close confinement and lack of ranghage. Brood sows suckling large litters may "break down" while subsisting on a ration composed in the main of grain or grain products.

Statement of Miss Norah March, B.Sc.

We have no accurate records of venereal diseases among the civil population, though figures are available for the military and naval services. We have reason to think that in the neighbourhood of 20,000 infected men were at any one time receiving treatment in our Army and Navy hospitals. We have reason to believe that infection is more prevalent among the civilian population—some of the returns made by the Free Treatment Clinics give us certain indications, *e. g.* according to the Annual Report for the year 1917 of the Medical Officer of Health for Croydon, 13,000 (approximately) affected persons received advice and treatment in the Free Clinics alone, in London and Home Counties area, during the year.

Each individual in an infective condition is a source of danger to others. If he is not careful in his personal habits, he may cause the spread of infection through contaminating articles of personal use, towels, shaving utensils, etc., a certain, though narrowed channel whereby these infections spread. And if he is not careful in his social and his sexual life, he is a very great source of danger to the community and to the race.

It is not necessary for me, I take it, to go into details regarding the dangers consequent upon venereal infection—dangers to the individual infected, to the community at large, and to the race. These matters have already been laid fully before this Commission. It is enough to recognise the present situation—that we have a vast number of infectious persons in the community—and the prospect—that we face a great spread of infection, a great increase in marital suffering, in child suffering, in personal misery, and a great lowering of the standard of national health.

To meet the situation and the prospect, two main avenues

of effort have been opened up—the educational and the remedial. A widespread education of the public has been initiated, chiefly by the National Council for Combating Venereal Diseases, and by various other social and educational organisations. By this means, the public is steadily being made to realise, on the medical side, the nature and prevalence of venereal disease, the necessity for securing immediate and appropriate treatment, and, on the moral side, the fact that, as continence is perfectly compatible with health in both sexes, the best means of avoidance of infection is chastity till marriage, and fidelity afterwards. The importance and the means of educating young persons in the laws of sex and in the paths of morality is an important feature of this educational campaign. The Local Government Board is doing everything in its power to encourage and facilitate the progress of this educational work.

On the remedial side, at the instigation of the Local Government Board, which is prepared to make a grant in aid, of seventy-five per cent. of the approved expenditure, local authorities are opening and conducting, and co-operating in the formation of, treatment centres, where diagnosis and treatment may be secured free of cost and confidentially, so that infected persons, or persons who have exposed themselves to possible infection, can in the theory of the scheme have immediate and appropriate advice, if need be, all without any monetary cost to themselves and without any risk of social stigma.

These present efforts of education and of free treatment schemes, both of them admirable and all to the good, are of their very nature slow to fulfil their objects to the community, and they have already revealed their present inadequacies, for very many sufferers who present themselves for treatment, either to the private practitioner or at the treatment centres, for one reason or another, fail to continue treatment till their medical adviser considers it safe for them to discontinue. To such an extent does this occur that we are bound to consider some further means of control.

We have already, in our Public Health Service, a system of dealing with communicable diseases—the system of notification, in the process of which, cases of certain scheduled infectious diseases are required to be notified by the medical attendant (or other responsible person in charge of the case) to the Medical Officer of Health, who is thereby rendered responsible for the protection of the community from this particular source of danger. The list of notifiable diseases has, since the principle of notification was introduced (in

1889), been constantly extended, and the option which at first obtained in the case of certain diseases, *e. g.* ophthalmia neonatorum, has been amended to compulsion—evidence of the value of the notification system as an agent in the control of communicable diseases.

The value of the principle of notification—namely, that it provides a means whereby the community may be immediately protected from the ravages of infectious diseases—is incontestable. Where the system of notification has failed to accomplish all that was expected of it, as, for example, in the case of tuberculosis, the fault lay, not in the principle, but in its *administration*.

Syphilis and gonorrhœa are communicable diseases. By exercising certain known precautions, the infectious individual can prevent the spread of these infections from himself to other individuals. With appropriate treatment the infectiveness can be easily reduced, even before cure has resulted. Doctors have, on the whole, been somewhat chary of pronouncing a "cure" of either of the diseases—a point which has constituted some objection to proposals of notification. But comparatively recently a certain medical sub-committee of experts in this country has indicated a standard of cure for gonorrhœa and syphilis, in both men and women, and the United States Public Health Service, which, when inaugurating a Federal Scheme of Notification, was faced with the same practical difficulty, has likewise published "Standards for Discharge of Carriers" upon which their experts are agreed. So that, as far as is at present possible, a standard of cure has been achieved. These are the essential facts to grasp. Because of these main facts concerning these diseases, I venture to suggest that they should be dealt with according to our existing machinery for dealing with communicable diseases, namely, through our Public Health Service, by notification.

We are told that notification of venereal diseases is not a practicable policy at the present time. Various arguments are brought up against it, but it is very comforting to learn that experience, as evidenced by practical administration of notification in many of the States of America and in Western Australia, goes to show that these difficulties do not materialise in any obvious or detrimental degree when notification is actually put into practice. California, by regulation of the State Board of Health, made venereal diseases notifiable late in 1909, as an experiment, and confirmed it by State Law early in 1911. Since that time one State after another has followed suit, till now venereal

disease is notifiable in a great majority [1] of the States, and it is hoped that this year will see the remaining States adopt similar laws. No State has rescinded its law requiring notification, and no State has amended it, save in some cases to strengthen it.

In order to safeguard the interests of the sufferer to the greatest possible extent (while, of course, recognising that in any conflict between the health interests of the community and the personal interests of the individual, those of the community should have first claim), it seems evident that notification should be anonymous, *i. e.* by case number only, the physician in charge of the case alone being cognisant of his patient's identity; that communications, if any be necessary, between the Public Health Department and the patient take place through the physician, and that arrangements be made whereby the patient could change his physician, should he for any reason desire to do so, without disclosing his identity to the Public Health Department.

These principles constitute the essence of the West Australian system of notification, which has been adopted and adapted in various other countries. For instance, such a scheme is in actual working in the State of Illinois. The physician, in the city of Chicago, as an instance, notifies the Public Health Department of Case "A," for example, whom he is treating for syphilis. The Public Health Department registers the case with an identification number, *e. g.* Case 5000, and sends to the doctor literature, each leaflet of which is stamped with the patient's registered number, for presentation to the patient, who is urged to pay great attention to the instructions—which are of an educational, not a treatment, nature—contained therein. One communication of this batch informs the patient of his registered number; that any communication which the Public Health Department may require to make, will only be made through his doctor; that if he desires, for any reason, to change his physician, all that will be necessary will be for him to report his registered number to the next physician who takes up the case (and who, of course, duly reports to the Public Health Department that Case 5000 has come to him for treatment, the former physician also reporting, if he has been informed—a requirement in some instances—that Case 5000 has left him to seek treatment under Dr. ——). He is informed that, provided he continues treatment till pronounced cured, and observes the

[1] According to figures supplied to me, March 1919, forty-four out of forty-eight States have made venereal diseases reportable.

necessary precautions to prevent himself from spreading infection, the State is satisfied, but if he fails to observe these requirements, his identity must be disclosed by the physician to the Public Health Department, and necessary proceedings taken by the latter. It will thus be seen that under this system, so long as a patient continues treatment as directed, till pronounced safe, none but the doctor is aware of his identity. Since this system of notification came into force (June 1917), we learn from Dr. Robertson, Commissioner of Health for Chicago, that from fifteen to fifty cases have been reported per day. In his own words, "I feel justified in saying that the venereal disease situation in Chicago has improved by leaps and bounds." He has found that venereal diseases have been reported much more readily than tuberculosis was when that disease was first made notifiable.

In July 1918, the United States Treasury Department announced its readiness to give a grant in aid of State work against venereal disease. One of the conditions for obtaining the grant is that the State must make venereal disease reportable—an evidence, it would seem, that notification has proved in the pioneer experience an effective weapon against these diseases. At the time my last information reached me—March 1919—forty-four out of forty-eight States had passed the necessary laws, and it was expected that the remaining four would do so very shortly.

As one of the chief arguments brought up against notification in this country is that through such a system we would fail to secure sufferers for approved medical treatment, but would drive them instead to quacks, it is interesting to learn of the experience which has followed the adoption of notification in some of the States. The following figures have been supplied to me (March 1919) by the Surgeon-General of the United States Public Health Service: "The new law in Massachusetts, requiring that venereal diseases be reported, became operative in February 1918. To January 1, 1919, 10,966 cases of venereal diseases had been reported to the States Department of Health. Of these 7,681 were cases of gonorrhœa; 3,285 of syphilis. "This law requires also that persons not faithfully continuing treatment should be reported by name and address to the Department. Under this ruling 1,336 names were sent in. By careful follow-up work 605 persons were reclaimed to treatment, and 390 are, at the time of compilation, still being followed; 341 have not yet been located —which, no doubt, means a rise in some other Health Depart-

ments' records."[1] While in Michigan, according to the report I have had from the Secretary of the State Board of Health, it is stated that physicians report frequently of cases which have been referred to them by pharmacists, when, prior to the venereal diseases campaign, the pharmacist would have prescribed for the case himself.

In Western Australia, where notification on these lines of anonymity was first introduced, the Commissioner of Public Health (see *Medical Officer*, May 17, 1919), while recognising that it is likely that they have not by any means secured notification of all sufferers, nevertheless seems impressed with the value of their results as obtained so far.

A notification scheme somewhat on these lines should be quite possible of adoption in this country. For its success it would depend upon the loyal co-operation of the medical profession with the State in its efforts to eliminate the scourge from our midst, and upon a vigorous administration of the Venereal Diseases Act, which should be so amended as to restrict the sale of specific substances, which might be used for amateur treatment.

When the Royal Commission on Venereal Diseases published its Report in 1916 it expressed its opinion to the effect that notification was not at that time a practicable measure. But though the years that have elapsed since the publication of that Report have been few, the events have been many and cataclysmic, and many people now express the opinion that the time has now arrived when notification should be reconsidered as within the sphere of practical adoption. Many doctors—private practitioners—have both privately and publicly announced themselves in favour of notification. Witness a letter which appeared in *The Times* on April 6, 1919, signed by six prominent medical men, headed by Sir William Osler.

I have been so much impressed by the number of favourable opinions in regard to notification proposals which I received informally from various medical practitioners, private and public, that I was tempted to institute a small inquiry. Consequently, I sought the opinion of 240 Medical Officers of Health, County, County Borough, Metropolitan Borough, and at the time of writing—but five days after dispatch of inquiry—have received already forty-four replies; of these, thirty-one express themselves as wholeheartedly in favour of anonymous and compulsory

[1] In Texas since notification came into force (Sept. 1918) an average of 5,000 cases per month has been reported.

notification on the lines I have outlined, three confess to holding no opinion, but have an open mind on the subject, six are in favour of notification as a principle, but are in doubt as to whether the time is yet ripe for its application to venereal diseases, while four only are opposed to notification—two definitely stating as their reason that they consider prophylaxis the most effective weapon, one only expresses the view that notification would lead to concealment, while the remaining one resents the "meddling interferences of bureaucratic busybodies."

It seems justifiable to conclude that the administrative medical opinion, as expressed by Medical Officers of Health, is largely in favour of compulsory and anonymous notification. It remains to discover how the private practitioner would co-operate in the scheme.

Medical practitioners are not, save for the public health officials, members of a national service, and may well be impatient as one public duty after another is put on their shoulders without recognition of their civil status. The payment of a fee for notification is a certain recognition of their services in the matter. For notification of ophthalmia neonatorum occurring in his private practice a doctor used to receive a fee of 2*s.* 6*d.* per case (though this has been reduced to 1*s.* as a war economy), and a similar or even larger fee should be paid on notification of venereal disease, for notification, together with the educational work which would necessarily fall to the lot of the practitioner, would make unusual demands upon his time and attention.

I do not suggest that any scheme of notification will prove an infallible agent in the campaign against venereal diseases. That would be too optimistic a view to take in the case of a nation which is slow to work out its own salvation, but I do suggest that in notification we have a weapon which we have not yet tried, and which, judging by its success in connection with other communicable diseases in this country, and judging by its success in its special application to venereal diseases in the United States of America and in Australia, we ought to employ without delay. Legislation, be it remembered, is a great educator.

Miss March. There are one or two alterations to be made in the précis, chiefly because I have some later figures. In regard to the figures concerning notification in Massachusetts, I have now more recent figures—those for the year ending March 1919. On the 1st of January there were 10,966 cases of gonorrhœa and syphilis reported; the figures for the year ending March 1919 show that 12,872

cases have been notified, which works out at one in 264 of the population. Then later you will find stated: "In Western Australia, where notification on the lines of anonymity was first introduced, the Commissioner of Public Health, while recognising that it is likely that they have not by any means secured notification of all sufferers, nevertheless seems impressed with the value of their results as obtained so far." The figures that I have had supplied since preparing the précis are that, during the last two years, 2,653 persons have been notified. The population is very small—305,000 odd—so that the proportion works out at about one in 115. I endeavoured to get some figures concerning the success of treatment schemes in this country, and the figures supplied to me for last year for a certain area where the free treatment scheme is best established worked out at one per 425 of the population of that area. At the same time I have come to the conclusion that, although the figures worked out in that way, we cannot justifiably make any comparison between the success of the free treatment scheme and of the notification scheme as operating in other countries. In the free treatment scheme we merely get the number of cases that have come under the scheme, and have no means of knowing how many have come under the care of private practitioners. In addition we have to take into account the fact that during the last few years a large proportion of our population—the military and naval sections—has been specially cared for. Under these circumstances comparison of figures only will give us no reliable evidence. Probably by the end of this year we should have something better to go upon in the way of making comparisons.

Further down the précis I have given an account of the inquiry I have made among Medical Officers of Health, and at the time I prepared the précis I had forty-four replies, and I have a few summaries of these here. I sent out letters to the Metropolitan, County Borough and County Council Medical Officers, and I have had up to date sixty replies. I did not send to part-time medical officers, nor medical officers of small districts. Out of those sixty replies, fifty express themselves in favour of notification; two quite definitely say that they would prefer notification by name and address rather than anonymously. The other forty-eight of these fifty write very whole-hearted approval of notification on the Western Australian system—that is, practically the anonymous system which I have outlined. Seven of those who are in favour of notification as a principle

express the opinion that the time is not yet ripe for it in this country. Three of the remaining ten state that they have a perfectly open mind on the subject; one of these three approves of the proposal which I have outlined in this précis, but in so far as to whether it can be as yet applied in this country, he has an open mind. I have had seven objections—in the précis I state four—the rest of the objections coming this morning. Three definitely stated that their objection was based upon the fact that they felt we had an easier way of dealing with the matter in prophylaxis, one of these stating that we were faced with making a choice between notification and prophylaxis; two express the opinion that harm would follow if adopted; one says that "horrible evils" would follow, but does not specify what they would be, while one objects to "the interference of bureaucratic busybodies."

1. THE CHAIRMAN. While you are in favour of notification of every infectious disease, you recognise that these venereal diseases present features which distinguish them from all other diseases; that is to say, they are more easily concealed, and there is more motive for concealment?—Yes; it is really, in a sense, due to the fact that we have not yet—as individuals and as a community—a well-cultivated civic conscience. We are too much inclined to put the interests of the individual before the interests of the community.

2. My question is not put from that standpoint at all. There is more motive for the concealment of venereal disease than anything else; you will concede that?—I can concede it in a certain way.

3. If on the part of individuals there is more motive for concealment, and greater means of concealment, would notification hinder people from seeking the relief and medical treatment that is so essential? Is your opinion definitely that notification would not act injuriously in the way of preventing people seeking medical advice?—I am inclined to think that notification by name and address would deter people. I am also inclined to think that unless people were well educated on the matter of anonymous notification, there, too, there might be some difficulty in the way of encouraging them to seek treatment, but if we could impress upon people that anonymous notification involves no publicity, and no breach of confidence on the part of the practitioner, and that there would be no risk of unpleasant consequences, then I don't think it would deter people from seeking treatment. A great deal depends upon educating people to the principle of anonymous notification. There

would probably be some residuum of sufferers who would fear that even under anonymous notification when put into practice leakages would occur. In one of the countries where anonymous notification has been provided for, provision has also been made for punishment for those persons responsible for leakage of information. If we had such a system of notification we should also have to safeguard against leakage of information.

4. DR. PORTER. Have you known things leak out of Public Health Departments?—I have not, but I am putting you an objection that has often been raised to me in many discussions I have had on this matter. As a matter of fact, in one country where the anonymous system has been put in force it has been especially provided for that one official must be appointed to keep all records of this kind, and that those records must be in the hands of that one person only. That means that the only person aware of the sufferer's identity is his medical adviser, and that the only persons who are aware that this medical adviser is treating a case of venereal disease, are the Medical Officer of Health and this recording official only. Attendance at clinics is already having the disadvantage of undue publicity in many cases, especially if venereal disease cases are dealt with on certain days or at certain times only.

5. But it would be quite easy to prevent leakage?—Yes.

6. You have not given the figures for Queensland, I notice. Have you seen the Queensland reports?—The last figures I had worked out at one in 410.[1]

7. Did you notice that the medical officer there was rather annoyed with anonymous notification, and wanted it to be by name and address?—Yes, and I noticed that in some of the States of South America, where they started anonymously, it gradually gave way to name and address.

8. Don't you think that people greatly exaggerate, and that this phrase, "The country is not quite ripe for it yet," is really a sort of meaningless thing?—I am inclined to think so, so far as I can judge from what people who have spoken to me on the subject have said.

9. Then you agree with me that the one advantage is that this is the better jumping-off place, and that you are going to get it quicker and get over objections probably better, and get more thorough methods, if you get notification rather than if you merely stick to treatment being

[1] See Dr. Douglas White's *Conspectus of Recent Legislation on Venereal Disease in the British Dominions and the United States of America*. Published by the N.C.C.U.D.

provided. Would you like to extend "Legislation as a great educator," and say that notification is a good jumping-off place, and that with it you would get a better start?—Yes.

10. DR. PRITCHARD. Do you think it fair that the failure of notification of tuberculosis is used as an argument against notification of venereal disease? My own experience is that the failure of the policy of notification has been an administrative failure. I have had a good deal to do with tuberculosis, and I think if I had not been very persistent I should have given up notification long ago. Some of my colleagues are so absolutely annoyed at the way the matter has been administered that in a great many instances they decline to do it. No notice whatsoever is taken. In my hospital I notify cases to Medical Officers of Health in all parts of London, and, as a rule, there is no notice taken of it, and I probably notify 150 a year, and in not more than ten cases do I get an acknowledgment. I am supposed, incidentally, to get a shilling each for such notifications; where the leakage is, I don't know, but it is a question of the way the thing is administered, although, in my belief, it is not an argument for the non-notification of syphilis, which could be done in a quite different way. I don't know if you can offer any explanation on that, and why it has been used as an argument?—I cannot discuss the notification of tuberculosis from the medical point of view, but I understand from what my medical friends tell me that tuberculosis itself is a very difficult disease to deal with from the administrative point of view, and that may, of course, account for some of the leakages under the system. You will be interested to know that among these letters which I have from Medical Officers of Health who are in favour of notification, it is denied that the notification of tuberculosis has been a failure, and some of them give figures from their own departments. So far as I can judge from my own study of notification, I don't see how we are justified in drawing comparison between the two diseases.

11. Do you think that this would lead up to another matter of almost equal importance—the certification of health before marriage?—So far as I can gather among the lay public, there is a growing sense of the importance of health being established before marriage. A sense of racial responsibility is developing very rapidly, and the time will come when people will regard it as the right and proper thing to have a medical opinion in regard to their fitness of parenthood. In parts of the United States they require

certificates of freedom from venereal disease before marriage. If venereal diseases were notifiable, an easier method of securing testimony as to fitness for marriage would be a certificate of freedom (up to date given on the certificate, which date should be as near to the date of marriage as possible) from certain notifiable diseases, on which schedule should be those diseases particularly prejudicial to parenthood. I was very much surprised a short time ago when, in lecturing to working-class people at Toynbee Hall, I mentioned these diseases, and in the discussion that followed a man said, "We don't deal with venereal disease like we do with measles, but we should." If we get questions like that from the working classes, it shows the way in which knowledge is spreading.

12. Miss Michelmore. If there was a possible leakage with notification that would give rise perhaps to blackmail, would it not?—It has always been an argument against notification, and when I was making inquiries on the point, Colonel Snow, of the United States Army Medical Service, said he had no record of such cases.

13. How would you deal with cases of persons under the Insurance Act; if they suffered from the disease, it would come into the hands of the officials of the Approved Society?—The National Council for Combating Venereal Disease has been taking some steps, I understand, to improve the position of venereal patients under the Friendly Societies.

14. Have you any idea of the result of notification in Denmark?—I have no detailed figures. I gather it has not been particularly successful, because the administrative methods were not what they were expected to be.

15. Dr. Sullivan. Would a man who has once submitted himself to medical treatment continue it?—If he failed to continue treatment he would be penalised in one way or another. During last year in Melbourne they had four successful prosecutions of people who failed to continue treatment. In the United States the general plan is not to prosecute, except as a last resource. They follow a case up carefully. In Chicago, as a last resource, they placard a house with a large red placard, "Venereal disease is here; keep out!" The medical officer reports that these notices are not usually allowed to remain on the house more than a few moments before the delinquent is ready to continue treatment!

The medical practitioner has to educate his patient in such a way that the sufferer will not only continue treatment, but will secure "contacts" for examination and treatment

if necessary. Such educational work is being carried out particularly well in the Massachusetts General Hospital by a system of social service.

16. Would it not, as has been suggested, rather work against one of the sexes?—I think not. Women have now considerable power, and it would be for them to see that administration is conducted fairly to women.

17. Lt.-Colonel Freemantle. Would you not agree that, having asked 240 persons for their opinion, these sixty who have replied include those who are most in favour of the proposal?—It is possible, but, on the other hand, considered in the light of experience of questionnairing, it is a very good percentage of replies. If they had been decidedly against, I think they would have written. Probably those who have not written against are not quite convinced.

18. Dr. Routh. I should like to say I am personally in favour of anonymous notification. I cannot help thinking that some of these things will lead up to others. It seems to me a logical sequence to notification that suspected carriers should be examined and discovered. Then, of course, would come the idea of getting rid of prostitution altogether—an excellent thing, but there may be a great deal of opposition to it. The idea of certifying men and women free from infection before marriage is an idea, I think, which could come in without much opposition.—My own view is that it ought to be the result of personal feeling in regard to the matter, but at the same time legislation would help us in the promotion of the right sense of personal responsibility.

19. Of course one of the great difficulties would be the impossibility of certifying every man or woman free from disease?—That is a difficulty, but at the same time the Medical Committee of the National Council for Combating Venereal Diseases have considered what may be regarded as a standard of cure. The Americans have also arrived at a rigorous standard of cure.

20. Colonel Bond. With regard to sex instruction and education of children in our national schools, is it a wise and proper thing to have an extended system?—It is a very big subject. To put it very briefly, I feel it would be best if the parents and teachers were working together in the matter; a great deal can be done in the schools to help the parents to give personal instruction to their children. If parents are anxious that their children should have this instruction, and are not able to give it themselves, I am one

of those who suggest that teachers could act *in loco parentis*. All over the country this is being considered, and at present I am giving a course of lectures to a mixed group of parents and teachers at Finchley. There are about two hundred or three hundred of these women teachers and mothers together at these lectures. That is just an indication of what is going on all over the country. Often in the last year I have lectured to over a thousand people a week.

TWENTY-THIRD DAY

Monday, June 23, 1919

REV. PRINCIPAL A. E. GARVIE, M.A., D.D., in the Chair

Statement of COMMISSIONER DAVID C. LAMB

I AM a Salvation Army officer, and both Mrs. Lamb and myself are Poor Law Guardians of the Rochford Union. We have had practically a life experience of social service. When the late General William Booth began his emigration work I was associated with him in setting up the department which was responsible for carrying out his scheme, and from the outset, in addition to my other duties for the Army, I have been Director of the Emigration Department. When the Salvation Army began its work of migration and colonisation the question of the birth-rate had not come into prominence, but the country was in the midst of a time of economic stress, and the problem of unemployment and poverty had forced itself into the forefront. Then it was claimed and demonstrated, to the satisfaction of most people, that the rush of people from the rural districts to the towns and cities had much to do with the unemployment that existed and the resultant distress, although that could not be claimed to be the whole explanation of the matter. Some of us had the idea in those days that the United Kingdom was over-populated, and probably we were right. For it cannot be denied that, following several years of an annual migration of over 300,000, that the numbers of the unemployed in this country steadily decreased, and that there was less poverty, if we are to take the statistics of pauperism as evidence. We can say of emigration, therefore, negatively that it did no harm to those who did not emigrate, and positively that it benefited in no uncertain way hundreds of thousands of persons who adventured

forth to make new homes and careers for themselves in the Oversea Dominions. During the War, and until a few months ago, there was no unemployment in the country. To-day there is unemployment, which, because of the extraordinary conditions of the time, could not be avoided, but whether this will be only a temporary phase of the transition period which our improved methods of organisation will overcome, time alone can prove. My view is that if there is a severe spell of unemployment and distress, that there is no hope of an improved birth-rate in this country, though, no doubt, there will be large migration from it. It has been stated that the C3 classes are adding to the population in larger proportion than the A1 classes, but in view of the increased publicity given to all matters pertaining to sex relationship during recent years I question very much if the C3 classes, faced with the prospect of hard times, will continue to be so prolific. The shortage of houses will also prevent many who may be counted in the B1 and B2 classes from marrying, and from that cause the birth-rate will also suffer. The disproportion of the sexes here before war was causing grave disquietude to many of us. Now it has assumed a menacing aspect. Socially it promotes all sorts of evils; in the sphere of labour it is bound to cause serious trouble, and this is not yet fully apprehended. I am convinced that in this time of Empire reconstruction one of the most vital considerations should be the question of a more equal distribution of the sexes throughout the Empire. Any plan of readjustment which overlooks the necessity of this will have failed in one of the most essential details. I submit that the necessity for a more equal distribution of the sexes throughout the Empire is imperative in the interests of an increased birth-rate—

(1) In order that men in the Overseas Dominions who have at present no opportunity of getting married should no longer be under this disadvantage;

(2) That there may be a higher standard of home life in those parts of the Dominions most affected by the paucity of women;

(3) And for the sake of the women of the Motherland, forced to the repression of their maternal instincts, and denied the opportunity of fulfilling their natural destiny.

While in this country our problem is the surplus women, the great drawback in many parts of the Dominions ever since the days of their pioneers has been the inadequate home life for men, owing to there being insufficient women to face the battle with them. It can quite well be said

that the progress of Canada and Australia has been hindered for lack of adequate female population, and, incidentally, I may point out that in Australia and New Zealand attention has been directed to a declining birth-rate.

The Salvation Army, by means of its Emigration Department, has been doing much in the direction of assisting women to settle in the Overseas Dominions. Thousands of selected British women have been transferred to the Dominions to take their share in the development of the Empire alongside the men. Since it started its operations the Army has migrated about ten thousand single women. Our failures over all do not amount to half of one per cent.

Women who go across the seas generally obtain situations in which they are better paid than they were at home, and where in most cases the conditions of employment are not so exacting, although from that I do not mean it to be understood that employers in the Dominions are any less insistent on efficiency than they are at home. Then, of course, the question of matrimony must enter largely into a consideration of this kind. Most of the girls who migrated under our direction have married well, and a recent advice from Colonel Jacobs, our Chief Immigration Officer in Canada, showed that within three years after their arrival in the Dominion seventy per cent. of the girls we sent out had married. A considerable number of our widows have re-married. From time to time we receive letters from lonely bachelors who have "made good" overseas asking us to assist them in getting wives, and invariably we have been able to help them. At the present time our Emigration Department is waiting for shipping facilities to continue the work which the war interrupted. We have already had applications from hundreds of girls desiring to go to various parts of the Dominions. For a few we have been able to obtain passages, but very many are waiting for the removal of the restrictions.

An analysis of a hundred cases taken at random shows that a large number of young women had been employed during the war in munition works, land work and war work generally. Among them is one spinster of fifty, but the girls mainly are between the ages of seventeen and twenty-six, twelve are between twenty-seven and thirty, and three in the early thirties. Their proposed destinations are in Canada, Australia, New Zealand, South Africa and U.S.A. The majority are for Canada, and Ontario is particularly favoured. Many have friends waiting to receive them, some fathers, others sisters and brothers, and not a few

sweethearts ready to marry them. As far as it is possible to judge, it is probable that, in future, the proportion of single women transferred to the Dominions will be considerably greater than it ever was before. It is expected that there will be opportunities overseas for girls who have been working on the land during the war or employed in munition-making, or in the various other occupations usually left to men. Many women who formerly might have been considered unsuitable for overseas conditions will have gained experience and developed capacity for many forms of employment that will render them valuable citizens for any community.

That the housing question will have a big effect on the birth-rate and on emigration goes without saying. Until the country becomes really in earnest with regard to the necessity for the demolition of slum property, and drastic steps are taken to deal with the iniquity in every town and city, you will still have a standing menace to health and morality. The principle of the minimum wage has now been almost universally accepted, and academically, at least, every man has been conceded "the right to work," but there is another "right" that should be insisted on, viz. every family's "right to live in a decent house." It is estimated that there is a shortage of housing accommodation amounting to nearly 400,000 houses in England and Wales alone. This naturally means decreased birth-rate as far as this country is concerned, but it means more emigration. The system of the bee-hive obtains in the case of nations. When the hive is uncomfortably full there is a swarming of the inhabitants. It is reported that there will be a large exodus from Scotland when the shipping restrictions are removed, and from our own observations we know that the report is correct. Is this to be wondered at when 47·9 of the population are living in houses of one and two rooms?—

Glasgow . .	471,982 persons	= 62	per cent.
Edinburgh .	112,383 ,,	= 36·7	,,
Dundee . .	101,178 ,,	= 63	,,
Aberdeen . .	61,176 ,,	= 38·6	,,

Some of us have reason to be proud of Scotland and the place she takes in the Government of the world, but frankly, even the most patriotic of us are ashamed of some aspects of her housing system, and are of opinion that some of the genius she so generously sends abroad for the benefit of other lands should be kept at home for the better regulation

of the domestic back yard. Scotland's young men and maidens are favouring migration more and more. The population is declining perceptibly. Something should be done to make Scotland attractive for her own people. But the bothy system still remains in the rural districts, only very slightly modified within the last thirty years, and in the cities, towns and villages the depressing and barrack-like tenement, fit incubator of the slum germ, continues to spring up in all its unredeeming ugliness. No wonder that a big exodus is expected from Scotland. The Dominions are benefiting overmuch, I am afraid, at the lack of civic sensitiveness of the Scot.

One way in which we could strengthen our population and ultimately benefit the birth-rate would be in showing greater care for the " unwanted " child. Illegitimacy seems to be on the increase, according to the Registrar-General's return for the last two quarters—and therefore the ranks of the unwanted child will be added to considerably. Migration—or transplantation, as I would term it when applied to child life—can be of great service in this connection. The child without a name has a poor time of it under any circumstances, but there are degrees even in the status of those born out of wedlock. The child of the unmarried mother under certain conditions may be received into family life, but what hope is there for the children born to the wives of soldiers while their husbands were on service—unlawful offspring fore-ordained to misery? The only chance for many of them is in being far removed from the circumstances of their dishonourable origin. Our observation leads us to the conclusion that there will be many such children. Generally speaking, with regard to the illegitimate child of the unmarried mother, our opinion is that the woman should care for the child, and that the father should pay in every case where he can be found. If he cannot be found, then the State should be prepared to contribute to the maintenance. The mother should never be left with the entire responsibility resting upon her shoulders. The fact that she has to maintain the child tends to steady the woman in the first instance. If the child is with her, affection develops. If it is boarded out, affection is less likely to be an important factor; still, need for effort to meet her responsibility has a restraining influence over the woman. But the time may come when the child may be in the way. Marriage may be offered to her, and not by her former lover. Then, I think, it should be made easy for the child to be transplanted. Even although the father of the child

married the mother, the child remains outside the pale of legitimacy according to the law of England, which is different from the law of Scotland in this respect, for in Scotland the marriage of the parents legitimatises the child no matter how long before marriage the birth may have taken place. And I think it would be a good thing if this Scottish law were adopted in this country, and it is quite conceivable that the result would be a saving in child life. The Salvation Army has done much for unwanted children, both in this country and in transplanting them to happier environment overseas. There are many interesting stories in our records of the wonderfully successful lives of children rescued from hopelessness and transplanted in clean and wholesome surroundings who have become industrious, self-respecting men and women; children who came from the workhouse, the slums, the brothel and divers other kinds of undesirable places. We feel some pride in the result of an experiment undertaken a few years ago, and in the record of the lads whom we know as the "Davidson Boys," because of the donor of the money who helped us to help the youngsters. They were arabs and gamins all of them, and we literally picked them off the streets. There were twenty-nine of them all told, and they were all sent overseas. Each of them did well. There was no exception. The War came, and they all joined up. Some of them have made the supreme sacrifice. They were all good lads, and a living example of what could be done for many who are left to fall into criminal ways.

For the ten years previous to June 1916 we had transplanted 750 children, 230 of them under fourteen years of age. These children came from—

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In 1918 we had 140 boys and seventy-seven girls under supervision of officers in Canada. At that time there was a sum of 7,845·57 dollars to the credit of the children in 161 different accounts, savings from the money they earned in the situations where we had placed them. When the war came on we had to economise in the Emigration Department, but we determined then that, whatever economy might be deemed necessary, it would not be such as would interfere in any way with the work we were doing on behalf

of the children. In pre-war days it cost £20 to select and transplant one child. We asked the people interested in each case to contribute what they could towards the £20, and Salvation Army funds contributed the balance. The allowance sanctioned by the Local Government Board for the Guardians to contribute for the emigration of children is not sufficient for the purpose. To sum up, I would say that emigration in transferring men, and women, and children, from cramped and stultifying conditions here to the scantily populated Dominions Overseas, where the bountiful resources of Nature have hardly been sampled, is performing excellent service in the interest of an increased birth-rate, and undoubtedly perpetuating British habits of living, British ideals and traditions, which in those dread times from which we have emerged so honourably stood the test so well. For great practical results towards the end for which this Commission has been called into service, it is essential that much careful attention should be given to a more equal distribution of the sexes throughout the Empire, that there should be a greater effort to secure overseas better opportunities of decent careers for the unwanted children of this country; and in general emigration some new inducement should be made to secure the migration of large families. There seems to be in some quarters a hesitancy to accept the responsibility for the transference of large families, but several of the most successful cases in our experience have been large families, who, notwithstanding initial difficulties, eventually made good in a very remarkable degree. It is on record that the foundation of one of the great Canadian cities was laid by a man who had twelve children of his own, and who adopted another ten whose father and mother had died on the voyage across. The children were to have been sent back, but the man and wife said, "We'll take them," and in the result their charity and their faith were rewarded a thousandfold.

1. Sir Rider Haggard. You have had a very large experience of this subject of migration, and I think you will agree with me that there is in this country a considerable antipathy to it?—In some quarters there is.

2. Can you give any explanation of the cause of that antipathy, and throw any light upon possible methods of combating it?—It is a difficult question. My observations lead me to this conclusion—that migration goes in cycles. With a great many people who do emigrate there is no antipathy.

3. But I am talking of the general mass of the voters in

this country, who, after all, regulate the Government procedure?—I would not say the general mass, but I would say that there is considerable and organised opposition to it.

4. Organised by whom?—I do not know, but I should say it is by what the political parties would call the "Little Englanders."

5. How about the Labour Party?—Officially the Labour Party are against it.

6. Why?—What they have said to me—not in recent years—is that they thought that the population of this country should be so organised that there would be no need for migration. Responsible leaders have said to me that they wanted to have an unemployed problem. It suited their purpose to have an unemployed problem.

7. In other words, discontent is agreeable to them. Was that from unemployed agitators?—I don't know that they would be so called.

8. THE SECRETARY. They wanted the leverage of a grievance?—Yes. I have known a man denouncing emigration in Hyde Park come off his box and say: "My dear Lamb, I have known this man for a long time; do the best you can to emigrate him overseas." I believe organised labour overseas is against immigration, because they have the idea that every man who comes there provides further labour which tends to reduce wages.

9. SIR RIDER HAGGARD. Apparently you are of the opinion that the population of this country is not going to increase rapidly?—When you come to the increased population you have to take not merely the children who are born into the world, but the number that are reared into manhood and womanhood. I should imagine that there is no immediate cause for alarm in a falling birth-rate if the children born are given the chance of growing up to manhood and womanhood. I hope that one result of this Commission will be to get better terms, better conditions; for instance, for the illegitimate child.

10. Anyhow, you think that this movement for restricting the output of human beings is going to strike right through the country?—Ultimately, I think.

11. Then you talk about the disproportion of the sexes, which you say is causing great disquietude, and you say it has assumed a menacing aspect, and that it promises all kinds of evils. How is it menacing, and what evils does it promote?—It is menacing at the moment on the industrial side. Employers of labour are not disposed to do all that they would have done two or three years ago in the way

of displacing the men, and you are going to be up against difficulties in the industrial world. That is where I think it will be menacing.

12. You think that the word menace is not too strong?—I have just had a man up who has been investigating for me through Scotland and the North of England, and I base it on his reports, as well as my own observations. He reports about the disinclination of women to go back to the old conditions.

13. Do you mean domestic service?—Not only that. They want to work and take big wages, and they are going to be competitors with the men.

14. Do you mean that they are going to keep men out of their billets?—They are going to compete with them.

15. Won't this disproportion of the sexes produce other troubles connected with sex?—Yes, one of the after-effects of war is terrible; the word "respect" has gone.

16. You think that that largely arises from the fact that there is a great disproportion of women?—Undoubtedly.

17. THE SECRETARY. Is that a passing phase?—The domestic difficulty will pass in six months, but this will pass in—well, twenty, or thirty, or forty years.

18. SIR RIDER HAGGARD. You say that the Army has had an extraordinary success with its migration scheme, and that the failure is only one-half per cent. What do you attribute that success to? It is not an invariable record where emigration is concerned?—First, careful selection, and then supervision on the way going over, preparation in the people's mind to the conditions to which they are going, and then suitable arrangements for their reception and placing.

19. Supposing your emigration figures were multiplied by ten times, would you expect the ratio of failures to remain the same?—I should think so, if the machinery were extended too.

20. Supposing you had the funds and so on, are you of opinion that you could find an enormous quantity of women who are willing to emigrate?—Undoubtedly, no limit.

21. I know you have experience of Canada and other places; are you of opinion that there is room for a very large number of women there?—Yes, I am satisfied of that.

22. They would be taken up for work or marriage, and would not clog the national machine?—If it was skilfully done.

23. And in Australia?—The same applies there, but the disproportion of the sexes is not so high in Australia.

24. Can you give me any idea of how many young women you think the Dominions could take?—I could not answer that offhand, but tens of thousands without dislocation to anything. One thing would be probable: it would probably reduce the wages a little abroad.

25. You would like to see unwanted classes in this country shifted to the Colonies?—I would say transplanted. If I were left to myself I would concentrate on the big families of this country. The real trouble here is that a man with five or six or seven children cannot get a house. I would lift them all, and that would help your birth-rate. I remember one woman coming to me, and she said that with her eight children she thought there would be a difficulty. She hardly seemed to understand what I meant when I said she would have a better chance if she had ten.

26. Your idea is that where the putative father of the unwanted child cannot be found that the State should accept responsibility?—Absolutely.

27. Would you not be practically endowing illegitimacy?—I would lay the obligation upon the State to find the father.

28. And supposing he cannot be found?—Then it becomes the duty of the State.

29. Sometimes they do not know who the father is?—Very seldom. If the mother is able to maintain the child herself, no question arises, but if occasion arose to supplement the cost of maintenance I would go to the Infant Life Protector, and get her to show that it was obligatory on the woman that she should say who the father was, and I would put the obligation on the State to find the father.

30. And if the woman will not say who the father is?—Then the State ought to pay the difference beyond what the mother can afford and what it costs to maintain the child.

31. Will you admit that it is an endowment of illegitimacy for the State to step in and endow the child?—The State does it now. The mother goes into the workhouse and is confined, and I pay through the poor rate, but if the Child and Maternity Welfare pay it, then I pay through the general rate; what is the difference?

32. Do you mean that you see no difference between paying a mother so much a week and the prevention of the child from starvation by putting it into the workhouse?—I must confess I do not see the difference, and I suppose Mrs. Lamb and I have dealt with probably some scores, perhaps hundreds, of these cases in the last few years.

33. THE CHAIRMAN. In the interests of the child, the child would be more properly looked after if we ran the risk even of appearing to endow illegitimacy.—Yes, and you know that the Poor Law can grant relief now.

34. Is it your experience, given good environment, sound instruction, proper food and the rest, that nearly every child, who is not really an imbecile, or insane, or suffering from some peculiar syphilitic taint, can be turned into a good and honest human being?—Certainly.

35. SIR EDWARD BRABROOK. I am struck, of course, by your statistics, and by the very small number of failures. May I ask what constitutes failure in the circumstances? Is it that the individual sinks into poverty, or shows himself or herself to be unfit for colonisation?—If the health broke down, or if there were a breakdown in their moral character, or if for any other reason we were called upon to deport them or bring them back home.

36. THE CHAIRMAN. Don't you think that the objections to emigration expressed by some of the Labour leaders were based on a question of social and economic justice?—Yes.

37. People want to get the surplus population out of the country in order to get rid of a grievance?—Yes.

38. Is it not in the interests of the employers to have a reservoir of labour here?—Yes.

39. Suppose you established an equality of wages between men and women, would that tend to eradicate the difficulty? —That is another question, and I am doubtful.

40. Don't you think that, on the whole, in most callings the masters would prefer to employ a man rather than a woman if they had to pay the same wages to a woman as to a man?—Yes.

41. Your policy is not to emigrate to the cities in the Colonies, but to the country?—Yes, unless the cities have made proper provision for their reception. You have a great many factories in the cities that can take a large quantity of labour, but they have no housing accommodation.

42. Have you considered that there is a tendency even in Canada to go into the cities, and not develop the country? For instance, more than half the population of British Columbia is in the city of Vancouver.—Yes.

43. Is it not a great mistake to send women of child-bearing age out to the prairie without a doctor being in reach?—Of course we have always tried to get our single women on to the outskirts of the population; we have not gone to the isolated districts.

44. You have not put them right into the heart of the

prairie?—No, unless in one or two instances where we had groups.

45. In future, ought not the colonial authorities to take steps to regulate the gradual spread of settlements from centres of population rather than have these very scattered places long distances from centres?—Undoubtedly.

46. THE SECRETARY. It is said that we ought not to spare another man from these shores, seeing that we have lost a million. Do you agree?—Your Colonies also contributed handsomely in the matter of men. I am all for the free movement of the people within the Empire—the freer the better.

47. But the great industries of this country must not be interfered with to an extent that would diminish our output.—I think you will never be able to control that.

48. You think there should be emigration of men as well as women?—Yes. I would give women free passages now, and the discharged soldier I would give his discharge in any part of the Empire he wanted, because he has been fighting for the Empire.

Statement of MR. T. C. MACNAGHTEN, C.B.E., Vice-Chairman of the Oversea Settlement Committee

The Report of the Dominions Royal Commission (Cd. 8462) emphasised the need for closer supervision over migration by the Imperial Government, and for the scientific study and treatment of the whole subject. It recommended the constitution of a central emigration authority, which should be in charge of emigration generally so far as it concerned the United Kingdom. The problem was also discussed with special reference to ex-service men in the Report of the Empire Settlement Committee (Cd. 8672), which similarly recommended the creation of a central emigration authority. His Majesty's Government have accepted the view that they should undertake closer supervision than they have exercised in the past in connection with the movement of British subjects who wish to settle overseas, and they therefore appointed a Committee, at first known as the Oversea Settlement Committee. The object of the change of name was to emphasise the distinction between oversea settlement within the Empire and emigration outside the Empire. The Committee, of which the Secretary of State is President, and the Parliamentary Under-Secretary of State is Chairman, consists of the Vice-Chairman, who is a member of the permanent staff of the Colonial

Office, and was the last Chairman of the old Emigrants' Information Office, representatives of the Government Departments chiefly interested in oversea settlement, viz. the Ministry of Labour, the Board of Trade, the War Office, the Local Government Board, two women representatives, representing women's interests (Mrs. Harrison Bell and Miss Talbot), two representatives of shipping interests (Mr. Ambrose and Sir Alan Anderson) and Viscount Burnham, who was for many years a member of the Emigrants' Information Office.

The Committee sees no special reason for adopting any general system of State aid to those who wish to settle overseas beyond such aid as is involved in improving means of communication with other parts of the Empire, and reducing the cost of passages. But they consider that there may be a case for giving direct State aid as a corrective of conditions which have arisen from the absence of supervision in the past, or through causes such as the War, *e. g.* the excess of women in the United Kingdom and the deficiency of women in the self-governing Dominions, and the existence in this country of numbers of poor children whose prospects overseas would be better than they are here. In 1911 there was in the United Kingdom between the ages of fifteen and forty-five a surplus of females over males of 566,000. In the Dominions in the same year there was a surplus of males over females of 484,000. It was estimated that in the United Kingdom on December 31, 1916, the excess of females over males between fifteen and forty-five had risen to over 1,250,000. Ex-service men, again, stand on a different footing from other classes, as in their case general economic considerations are largely subordinated to the obligations of the nation to the men who have served in the War. The Committee would welcome a decision by His Majesty's Government to grant State aid—which would take the form of assisted or free passages, and possibly supplementary assistance overseas—(*a*) to women, (*b*) to juveniles (orphans and deserted children, and children from reformatories and industrial schools) who already before the War received some assistance through Boards of Guardians, etc., (*c*) to ex-service men. Up to the present time the only decisions which His Majesty's Government has taken involving State aid to settlers overseas are (1) to grant free passages to the nearest convenient port to their destinations to ex-service men and their dependents, and to ex-service women wishing to settle within the Empire overseas, provided they are approved under one of the agricultural

settlement schemes of the Oversea Governments or are going to assured employment, and are otherwise acceptable to the Government of the territory to which they desire to go; (2) to provide financial assistance for higher education, general and technical, and for training in agriculture to a limited number of ex-service officers and men of similar educational qualifications who have to complete their studies overseas instead of in this country.

There is one thing I want to make quite clear, and that is that in setting up the Oversea Settlement Office, or the Government Emigration Office, as it was originally called, it was not the intention of the Government to encourage oversea settlement. What they were anxious to secure was that much more information should be available than in the past, so that a man who was bona fide resolved to settle in some other part of the Empire, should have as good information as it was possible to give him, and should be advised as fully as possible as to the part of the Empire best suited to his special proclivities.

We are anxious to draw a distinction between oversea settlement within the Empire and emigration to foreign countries. The change in the title of this office was made in order to emphasise that distinction.

1. THE CHAIRMAN. It was not to encourage, but was directional?—It was friendly sympathy and direction. One thing I am quite clear about is that the Oversea Settlement Committee, and I think I may say the Government too, agree with what was said by this Commission at the deputation to Mr. Walter Long in 1916, as to the need for increasing the white population within the Empire, and in the self-governing Colonies. Those views were expressed by Dean Inge and Principal Garvie. One thing which my Committee are extremely anxious to see is encouragement to the settlement of women overseas at the present time, in so far as there are really suitable openings for them in the Dominions, in so far as they will be welcome, and in so far as arrangements can be made for their reception and after-care. The War has opened up new avenues of service for women in this country; and the women of the Land Army and of the war services appear to be an exceptionally suitable class for settlement overseas, and I myself think that the Oversea Dominions would be extremely fortunate to secure a large number of these women.

I don't know whether this Commission is aware that we are sending out deputies to inquire into the extent to which there will be openings in Canada, Australia and New Zealand

when shipping is available, with special reference to openings for women of the Land Army and the war services. My Committee would rather like to see a flat rate established for travelling to the various parts of the Empire, and I think it would be a very good thing if a bona fide traveller could get either to Canada or to Australasia for £5.

I ought to mention that there has always been, both in this country and overseas, a certain undercurrent of opposition to oversea settlement, and I think we have to go extremely cautiously on that ground.

2. Would you agree that some of that opposition is due to the fear that emigration is offered as an alternative to improving conditions in this country?—Yes, but I do not mean to say that that fear is in the slightest degree well-grounded.

3. With the flat rate established would it be possible to regulate the flow of settlers to those parts of the Empire where they are most necessary, that is to say, if Australia needed more than Canada at any time, if there were a flat rate it would be possible to secure more for Australia?—I am not anxious to guide people to one part of the Empire more than another.

4. That was not in your mind in advocating a flat rate? —No, I think Australia suffers from being at a much greater distance.

5. You would leave it to the individual preference, only you would remove the obstacles by having the scale fixed? —Yes.

6. As between the sexes?—The Committee incline to favour the migration of women, owing to the fact that there are between the ages of fifteen and forty-five about 1,250,000 more women than men in this country.

7. Sir Edward Brabrook. No doubt the statistics you give in your memorandum prove conclusively the necessity for migration as a remedy for the excess of the female population.—The desirability, at any rate. I think it is very doubtful if the oversea settlement of women will ever reach a point at which it remedies the present disproportion of the sexes in the United Kingdom. There is always a tendency for the migration of men to exceed that of women. In the five years before the War I think men emigrated in the proportion of five to four women. It would be very hard work to get even that disproportion adjusted.

8. I gather that you don't consider it is part of the duty of your Committee to look out for emigrants, or to do more than to obtain the best information you can with regard to

the condition of emigration to any particular place, and you leave the public to come to you. You don't do any case work in connection with it?—No, and if we did we should do it only through the recognised emigration societies.

9. Sir Rider Haggard. In the first paragraph you allude to the recommendations which we made on the Dominions Royal Commission, and I think on the Empire Settlement Committee too. Is there any chance of those recommendations being translated into action at all?—They had been to some extent. The Government Committee has been set up, though it has not been statutorily established by law.

10. It can scarcely be described as a central emigration authority. I think we had in mind a more representative body. The Dominions Government subsequently said they did not want to be represented on the Committee, only in an advisory capacity.—I think what the Government had in mind when they appointed this Central Committee was that it should act as adviser to the Government on the question of oversea settlement.

11. Your Committee?—Yes.

12. Do you suggest that any authority should be set up which would undertake at all to follow the settler abroad, and look after him, or administer the settlement or anything?—I think that must be done very largely through the existing voluntary societies. For instance, a most important thing is the after-care of women. The Women's Emigration Societies and the heads of the war services are all very anxious in regard to the question, and I think it should be impressed upon the Oversea Governments.

13. Do you think that the Oversea Governments would superintend the settlement so that people were not cheated, and that they got a good block of land, or got what was paid for?—We have always thought that that must be left to the Dominions Government.

14. Do you do your best to stop people from emigrating outside the Empire?—Yes.

15. Would you be in favour of having some kind of legislation preventing it for a while?—No, and I doubt for the moment if it is practical politics. There is only one place outside the Empire which is attractive to a large class of our people, and that is the United States of America. I don't see how you could prevent any one who wanted, going to Canada and crossing over that wide border.

16. How would you suggest that funds should be provided?—I should be glad to see a flat rate of £5 for all

settlers accepted by a Dominion Government, and the balance of the cost borne by this Government and the Dominion Government concerned equally.

17. That practically comes to Australia. As matters go now, for Australia, I suppose, even a third-class fare would be £35?—It will go a great deal below that within a reasonable distance of time.

18. Do you think there are many people wanting to emigrate?—Emigration before the War was at the rate of about 250,000 a year; there has been none for four years, and there is exceptional unrest as a result of the War. I think the number will be enormous, but it is impossible as yet, because there is no shipping available for settlers. Since Colonel Amery made his statement in regard to the matter we have been getting nearly a hundred inquiries a day.

19. You said that you had sent some deputies to inquire. What did you mean?—We have sent two women to Canada, and two are going to Australia and two to New Zealand, to inquire what openings there are for women generally, and especially for women of the Land Army and war services.

20. As a matter of fact, the women they want in Australia are servants. They don't want clerks.—So I believe, and I do not myself believe that there is much opening for industrial labour.

21. As they won't be servants here, I don't suppose they will be servants in the Colonies.—It is a curious thing, but I think many will. A servant lives differently there. She lives as one of the family, and, though she has to work, and work jolly hard, she is more of a household help, and there is not the same stigma as in this country.

Twenty-Fourth Day

Monday, July 7, 1919

Rev. Principal A. E. Garvie, M.A., D.D., in the Chair

Statement of Dr. Eric Pritchard

Whether infants who have survived the nine months of intra-uterine life, and are born alive, continue to live under the new conditions of existence, depends on their power of adapting themselves to their new environment, that is to say, on the normal and efficient working of the various

organs which fulfil the functions of respiration, circulation, digestic, excretion, temperature, regulation and nervous co-ordination. A certain proportion of infants are born with malformations and physical defects of development which render the satisfactory carrying out of these functions impossible. From the Registrar-General's Report for the year 1917, it appears that the proportion of deaths due to such causes was approximately twenty-six per thousand births. (Injuries at birth 1·15, atelectasis 1·61, congenital malformations 4·6, prematurity 19.) The remaining deaths, viz. seventy per thousand births, were due to causes that could not be referred to any demonstrable defects in the infants at the time of birth. About forty deaths per thousand births were attributed to infectious diseases of one kind or another. (Pneumonia 11·44, diarrhœa and enteritis 10·3, bronchitis 8·43, tuberculous disease 2·75, measles 2·73, syphilis 2·03, etc.) The rest were due to miscellaneous diseases, including a large number classified as wasting, debility and marasmus. Without including a large proportion of the deaths due to prematurity or those classified as marasmus, most of which are undoubtedly also due directly or indirectly to infectious disorders, it is clear that infection of one kind or another is responsible for much the largest number of the deaths that occur during the first year of life. My own experience is that a very much larger number of infants die from unrecognised infections than is usually believed to be the case.

New-born infants are unable to defend themselves against a large number of quite simple organisms from which older individuals are completely immune, or of which they may be the actual "carriers" without detriment to themselves. The chief defence of the new-born infant against pathogenic germs which gain entrance to the body, are the immunising properties of the maternal blood, which continues to circulate in its system until the infant has acquired independent powers of generating its own blood. These properties depend partly on placental activity and partly on the experiences undergone by the mother in connection with the infective organisms to which she has herself been exposed. During the first few days of life, owing to the macerated condition of the infant's integuments and the vulnerability of the mucous surfaces, it is comparatively easy for micro-organisms to gain entrance to the body of the infant. Good mothercraft, which practical experience proves to be efficacious in preserving the life of the infant, helps to preserve the natural defences of the body against bacterial invasion,

or to maintain or raise the degree of tissue immunity. For instance, all improvements with respect to asepsis in the management of the parturient woman also tend to preserve the infant from infection, and the more careful handling and management of the child with respect to washing, clothing, airing and care of the umbilicus serve this same purpose. The natural immunising properties of the infant's blood are almost certainly fortified and reinforced during the first few days of life (by far the most dangerous period) by colostrum, which is practically blood plasma, and quite possibly at a later date by her milk also. The artificially fed infant is cheated of this incomparable right, and hence more easily falls a victim to vicarious infection; further, by the damage inflicted on the digestive tract by unsuitable foods before the digestive organs have developed their normal functions, the infant is exposed to the entrance of organisms through the areas of lessened resistance. Artificially fed infants, and especially those fed on patent foods containing a great excess of sugar, are notoriously non-resistant to infectious disorders. The reason for this is, I believe, that the elaboration of protective bodies within the system is a function of nitrogenous and not of carbohydrate metabolism.

The sources of infection are, even under the best possible circumstances, manifold, but the dangers in slum areas and institutions where the infants share the same room with several other individuals, these dangers are greatly magnified. In a bacteriological sense the environment of the mother is the safest one for the infant, because against infection from this particular source, the infant has in its own blood—*i. e.* the mother's—the best defence. The most efficient measure to ensure the safety of the child from the source of greatest danger to its life is the teaching of this knowledge to the mother, midwife or other individuals who may be responsible for the care of the child during the early days of life. In those places where such knowledge has been systematically taught there has been a most noticeable fall in the infant mortality rate, and this quite apart from any other social, hygienic or sanitary reform.

Dr. Pritchard added: The particular point that I want to bring out in this evidence is in connection with my own personal experience with regard to the prevention of infantile mortality, and to point out that it is very largely a matter of infection from one sort of germ or another, and that most of the methods by which we have recently been meeting infantile mortality have principles in a good many cases unwittingly designed to meet this special danger. I

would like to point out that if the actual principles with which we have to deal were better understood, more rapid progress would be made. During the first year of its life an infant has very great difficulties in contending with the invasion of germs, not necessarily of recognised pathological character, such as pneumonia, measles and influenza, but often of a kind of which the adult is a carrier with complete safety to himself; with these the infant cannot deal satisfactorily, because his ordinary defences have not had time to develop. The particular forms of germ to which I refer are those which inhabit the intestines, and those which are the natural inhabitants of the skin. These live on the adult human being without causing any manifestations of disease, because he is so well protected by his own acquired immunity. The young infant is defenceless in a very large measure to bacteria attacking him from the surface, or from within. I feel sure that a good deal of infant mortality could be prevented if those who deal with young infants, *i. e.* mothers, nurses, midwives, health visitors and so on, realised what a very serious source of danger this kind of infection is. The new-born infant's skin is particularly defenceless, because, instead of having a hard and dry surface, as the rest of us have, it is soft and macerated, and the mucous surfaces are also very vulnerable. In this connection I would like to point out the serious danger of giving a dose of castor oil during the first few days of life. Nature seems to have been careful in protecting the intestine by meconium. Almost immediately after birth the intestine begins to become infected with bacteria, and in a short time it contains swarms of them which are almost impossible to estimate. As soon as the meconium is cleared out by natural means or by purgatives it loses a great deal of its power of resistance to microbial invasion. A large number of infants die from infections against which they have no resistance, and without anybody expecting it. I have had several cases in the last two or three years in which the child has died from minute abscesses on the liver which no one could have suspected. It appears to me to be one of the very important elements in carrying on a campaign for the prevention of infantile mortality to let those in charge of infants know these dangers. In the crowded areas there are more opportunities for infection than in the country, where the population is sparse, and in towns there are more opportunities for infection when houses are big, and where there are a large number of rooms in each house, and a larger number of infants in each room.

I think that very largely explains, without going any further, why the mortality and morbidity is so great in such places as maternity hospitals, maternity homes, and especially Poor Law institutions, where often a large number of women are confined in one room. I believe it is quite impossible to have a large number of infants born within a day or two of one another in one ward without serious danger of infection. They mostly get raw buttocks, which is an infection of the skin, and a very large number get infection of the mouth, manifested by thrush, and the same fact explains the very high mortality rate we know so well in Poor Law institutions. The more care that is exercised in saving the mother from infection, the better is it for the infant also. I consider one of the best means of preventing infant mortality—and more especially infant morbidity—is the isolation of the infant. With regard to the raising of the resistance of the child against infection, which, however careful you are, must occur in some degree, natural feeding is a long way the most important; and more especially natural feeding during the first few days of life, when the infant's immunity is beginning to fail. As the infant begins to manufacture its own blood, it loses a certain power of resistance, especially the artificially fed, but when fed by the mother it is practically fed on the mother's blood. That is a point on which I would like to lay considerable emphasis. During the first four or five days of life, the child is fed on the mother's blood, *i. e.* colostrum, and although there is no complete scientific evidence to prove this point, it is clear the mother's blood must reinforce and fortify the resistance of the infant by keeping it supplied from the mother. I think it is also exceedingly probable that the milk itself contains certain immunising bodies, although not to the same extent that the colostrum does. The new-born infant naturally fed by the mother carries on for a time the natural immunity of the mother. Therefore the environment of the mother is a much safer environment than that of any other individual, whether it be another mother, a nurse, or any other individual, because the mother herself is immune to her own germs, and her infant, fortified by the same blood, is perfectly safe from the mother's germs, but the infant is not safe from the bacterial flora that rises from other people. I have got a considerable amount of clinical evidence to show that this is the case; that infants do well for a certain time when they have got familiar with the bacterial flora of any particular woman who looks after them. Change that woman or nurse, and

the infant gets a new bacterial flora into its system, which it may not be able to resist. The larger the number of people with whom the infant comes in contact, the more difficult is it to prevent the minor manifestations of infection.

Where scientific mothercraft has been systematically taught you get a continuous fall in the mortality rates. In Worcester the infant mortality rate was very high up to 1905 or 1906; it was somewhere about one hundred and forty-eight per thousand births. When they began here a systematic course of teaching mothers simple mothercraft by means of nurses or health visitors, who went to the mothers in their own homes, and later on carried on consultations, the fall was most striking. Worcester is a most conservative town, and the conditions have little altered during this period. However, from 1901 to 1905 the death-rate was one hundred and forty-eight per thousand of the birth. In the period from 1906 to 1910, when this mothercraft teaching began, it fell to one hundred and sixteen; in the next five-year period—from 1911 to 1915—it fell to eighty-seven; for the year 1916 it was only seventy-eight; in 1917 it was only sixty-four, and last year, 1918, when conditions were exceedingly bad, the fall was to sixty. I think that is a very remarkable series of figures.

The other figures I produce are from Marylebone. In the year 1900 the death-rate was over one hundred and seventy per thousand. During the next two years, when sanitary reform was undertaken, many of the old tenements were pulled down and housing conditions generally improved, the total number of the population decreased, and there was a fall to one hundred and thirty-six. This continued with a very slight fall until 1905, when the systematic teaching of mothercraft commenced. The fall during the next four or five years was to the neighbourhood of one hundred, with ups and downs since according to meteorological conditions. During that period there was a general falling in the general infant mortality rate throughout the country, but not in the same proportion.

1. DR. SALEEBY. I suppose you will agree that we must be very cautious in accepting these relative proportions of cases given in the Registrar-General's Report? You would say that the figure here: "the proportion of deaths due to such causes was approximately twenty-six per thousand births"—that figure might perhaps cover a good deal of pre-natal infection?—Yes, I should certainly say so, and also infection very probably in a very large number of cases immediately after birth, when the child's power of resistance

is exceedingly low. The power of resistance of the infant to the dangers of environment is immediately weakened when the temperature falls. Children's temperatures fall very rapidly, and the lowness of the temperature is seldom recognised, owing to the fact that the majority of midwives do not use thermometers, or, if they do, they do not register sufficiently low readings, and that is a very serious point. If they go down to ninety their chances of survival are very little. I have come across children with temperatures of eighty-eight degrees who have survived, but such events are rare.

2. Similarly, you will agree that these figures of diarrhœa, enteritis, bronchitis, measles, syphilis and so on are grotesque? —I think so.

3. It is strongly against the institutional treatment of the problem. They tend in the direction of whatever will favour breast-feeding, and whatever will keep the mother at home?—Whatever will keep the mother with the child is to be encouraged, but not with a large number of other women, as in an institution, where a child may be exposed to greatly increased sources of infection.

4. In other words, at home?—No, the best results I have seen are in the small maternity homes where the mother has a room to herself.

5. Your arguments tend in favour of the endowment at least of widows?—Certainly.

6. These contributions given this afternoon, some of which are absolutely new, even to a professed student like myself, do not by any means cover the whole ground of infant mortality, and you will agree that we would do well to call some other evidence with regard to some aspects of this question?—Yes. I only gave you my special evidence because it is a subject I have specially studied. I knew, coming before this Commission, that the ordinary causes of infantile mortality would be recognised, but I take it this is rather a newer phase of the matter.

7. Your evidence that certain kinds of knowledge have caused a noticeable fall is to the effect that you could lower the death-rate without lowering the birth-rate?—Certainly, and that constitutes a possible comment on such doctrine as that Dr. Halford Ross and others would seem to support, that there is a constant correlation between the birth- and death-rate.

8. Colonel Bond. Dr. Pritchard lays great emphasis, and quite rightly, no doubt, on the susceptibility of the newly-born child to infections, and he refers to the funda-

mental fact that part of the machinery is derived from the mother's blood and milk supply. Is it known at all how long that immunity lasts in the infant, because there are one or two curious facts which it is difficult to explain purely on that supply by the mother of blood and milk. I wonder if Dr. Pritchard knows of anything which shows the continuance of that in the life of the infant?—I know the actual experiments that have been done on the blood of the infants are very inconclusive, and they are very few. On the other hand, the evidence for the immunising bodies is very scanty indeed, and there are a large number of people who do not believe in it at all, but I think you cannot get away from the general principle that if the mother's blood does contain immunising bodies which protect her against her own bacterial flora, and if colostrum is practically the blood of the mother, as it is, it ought to convey some immunity to the new-born infant. I imagine that for every form of infection the period for which the blood would retain its protective properties would differ. One knows how short is the immunity from influenza and how long that of fevers like small-pox.

9. Would you agree that there is an enormous ground for further research?—Enormous. I feel very apologetic in offering this to this Commission, because it is not supported by anything more than general principles and common sense.

10. Dr. Routh. It is an extremely important subject, and it has not been brought before us to-day to make us realise the frequency of a child's infections. As regards syphilis, Dr. Pritchard puts it amongst the infectious diseases. It really is at that stage a congenital affair, or do you think that the new-born child becomes infected at birth?—My figures are taken from the Registrar-General's Report, but I would like to say my own view about the infection is that the mother herself during pregnancy has an immense immunity to syphilis, and she does impart that to the infant, and as the infant loses its natural immunity it very soon becomes a prey to syphilis from re-infection. It may even have the spores or germs in its own system, which are at first held in check owing to the child's immunity.

11. The fact that these children do not develop syphilis until two or three weeks after, rather implies that there is something which the child gets into the system which passes off after a certain number of days or weeks, and you think that immunity is carried on after birth with the milk?—I think it is quite possible, but that would only apply to the mother's milk?

12. It would not apply to a wet-nurse?—No.

13. Now about tuberculosis. Is it the fact that according to the Registrar-General's return that 2·75 per cent. of children die of tuberculosis? Are these diagnoses given by a doctor?—Yes.

14. You are aware of some American writer, during the last year or two, who wrote that a large number of the bronchial catarrh cases and so on were tubercular in their origin?—Yes. Dr. Emmen Holt.

15. Do you agree that it is correct that a large number of cases put down to bronchitis are really due to tuberculosis?—It is very hard, in my experience, to get the positive proof of tuberculosis in infants unless there are gross lesions. I am quite convinced that an enormous number of infants do die from tuberculosis without tuberculosis having been discovered or being capable of being discovered.

16. Have you any explanation of the fact that children are hardly ever born with tuberculosis, even with tuberculosis mothers?—I have a certain amount of personal evidence with regard to that. Mothers with open tuberculosis have come to my out-patients' department, or my clinics, in which I have kept their infants under observation for various periods, until they have developed a reaction to tuberculine—which, I suppose, means that the tubercle bacillus is active in their bodies; and as a rule there is no reaction for the first five or six weeks after birth, although the mother may be a very serious infection agent. I have not come across a case yet in which a child has been born with manifest tuberculosis, even though the mother may have suffered from open tuberculosis.

17. Don't you think, speaking of the tender skin, that maceration is not quite the word to use?—The skin has been soaking in water for eight or nine months and has become macerated with the water. That is the term used in histology, but I see the ambiguity of the term, and I shall be careful about using it in the future.

18. Do you think babies are washed too often to begin with?—I do.

19. Ought they to have a bath as soon as they are born?—I believe that Nature covers the outside of the child with vernix caseosa for the express purpose of protecting it.

20. Mgr. Brown. Do you discourage washing at the clinics?—You would have to close your clinics if you did it at the present time. I certainly do all I can to impress upon health visitors and midwives how very tender a

child's skin is, but sometimes it is scraped bare. I have known even a nailbrush to be used.

21. DR. ROUTH. I should like to ask Dr. Pritchard what he thinks about boiled milk, and the effects of feeding children by it?—With regard to certain organisms, experiments have been made in which the unboiled milk has apparently some inhibiting effect on the growth of bacteria, but those experiments, so far as I know, have not been carried out to any large extent, and they have not been confirmed. From the practical point of view, I don't think it is a question of importance at all.

22. DR. SCHOFIELD. Is it not better to heat it to 160°, instead of raising it to boiling-point? Does not 160° sterilise it and yet get rid of the evils of boiled milk?—If you are going to kill germs, you have got to boil the milk, but I do not agree that boiling milk is detrimental to the milk as regards the feeding of infants.

23. You yourself have laid great emphasis upon breast-feeding, but you do not know whether in either of those records there is anything of how many mothers fed their children in a natural way, or how many did not?—I know in Marylebone there was a tendency for breast-feeding to be carried out more largely than before.

24. Over what class of the community would that extend? —Over the clinic class. Breast-feeding among the upper classes was rapidly declining up to a few years ago, but among the insurable class I think there is a tendency to increase where there has been proper instruction.

25. DR. ROUTH. As a matter of fact, that is the main stock-in-trade of these maternity centres?—That is very important teaching.

26. THE CHAIRMAN. May I suggest that in Worcester the breast-feeding factor would be a very important factor, because there are not a great many women employed in Worcester?—Oh yes, it is becoming a manufacturing town.

27. MGR. BROWN. If it is so important a factor, don't you think it important that a crusade should begin from the top?—It would be very advisable, but it is very difficult. The upper class infant mortality is very low, because these infants are protected against infection so very completely as compared with the poorer child.

28. Don't you think one of the great factors why a woman does not take a child to the breast is that it is not considered good form to do so?—That is not the view that I take. I don't think it is so much that; I think she prefers

her freedom, and there are certain reasons of personal vanity which come very largely into the question.

29. MISS MICHELMORE. How long before her confinement should an ordinary working woman abstain from employment—a woman working under normal conditions, and taking a normal case?—She need not abstain more than about six weeks. I don't think that if she is working under healthy conditions that it either does her or her child any harm. I cannot myself see that it is more detrimental to a woman to do that class of work than the ordinary household work. Women who do their household work up to the end have healthy children.

30. I believe there are more boys born than girls?—Yes.

31. Does that mean that girls are more immune from infection; more boys are born, but more boys die?—I believe that the male animal is a more complicated animal, and reacts more intensely to the environment after birth. Therefore he has many more chances of death. That is the view I have always taken.

32. DR. SCHOFIELD. I am sure that Dr. Pritchard will agree with me that one of the great advantages of breast-feeding is that the child gets the milk free from dirt; it is absolute milk and nothing else. Has the mother's milk an equal value for other children—the children of other people—as it has for her own?—In my view it has not.

33. May I ask why?—I tried to explain the reason just now—the mother's milk offers immunity to her own bacterial flora, namely, that to which the infant is naturally exposed, and another's milk does not.

34. MGR. BROWN. Would Dr. Pritchard say if another's milk—that is, another woman's milk—would be better for a baby than a cow's?—The answer to that is in the affirmative.

Statement of DR. HALFORD ROSS, late Health Officer, Suez Canal Zone

During the years 1901 to 1910 health measures in this zone produced a very considerable fall in the death-rate, from 30·2 per thousand to 19·6 per thousand; the infant mortality was also reduced very greatly, and it was expected that, after a lapse of time, the reduction of the death-rate would result in the rise of the birth-rate, and a corresponding increase in the population. But such was not the case. When the death-rate fell, the birth-rate fell too, and the number of the population remained the same as before,

even after nearly a decade had passed, and notwithstanding the fact that the whole district had become much healthier, and one town, Port Said, was converted from an unhealthy fever-stricken place into a seaside health resort. It has been a chosen site for military hospitals during the war, and healthy armies have been camped in the neighbourhood. From these observations it would seem that there is a constant correlation between birth-rates and death-rates. As one increases, the other increases; and if one is reduced the other falls. In a certain place a serious epidemic of plague occurred in 1907. The death-rate rose higher than the birth-rate for three weeks, but very soon the birth-rate rose and regained its former relation with the death-rate, which remained high for a time. Then both fell together to their original level as soon as the plague disappeared. A similar correlation of birth-rate and death-rate was noticed in Cairo in 1910 during a severe fatal outbreak of small-pox. This correlation of births and deaths makes any measures taken to modify their rates appear futile, because their relationship seems to follow a natural law, which at present is not understood. Our aim, then, should be to prevent all disease, so that infants when born are healthy and remain healthy through life. In this way the most efficient population can be obtained. In the Canal Zone, after the health measures were accomplished, the people were much happier, and more affluent and industrious. It was found that the best way to prevent disease is to find out the cause of each and the precise way that it is conveyed from one person to another; diseases can then generally be prevented. In this way, malaria, yellow fever, Malta fever, sleeping sickness, dengue fever, have been prevented in various districts. But no disease yet has ever been prevented by treating or trying to cure individual cases. Medical research should, if sufficiently encouraged and properly conducted, lead to the knowledge of prevention of all diseases, which, in turn, would result, probably, in a healthy and efficient population.

Venereal Disease at Port Said.—At Port Said, in 1905, there were eighty licensed houses containing nearly five hundred prostitutes. Most of these were either suffering from, or had suffered from, venereal disease. The majority of the women were Egyptian or Syrian, but there were representatives of all the European nationalities except British. After an agreement had been made with the Consuls of the nations signatory to the capitulations, these houses were suddenly closed, and the inmates deported.

The result was not satisfactory, because it led to much promiscuous prostitution in the town, which, being uncontrolled, was worse than in the licensed houses; and venereal disease spread rapidly. At that time there seemed no other way but to re-open some of the licensed houses, and three were re-established. The inmates were subjected to regular examination at the hospitals, and cases of disease among them retained in hospital until cured. In this manner venereal disease was kept down.

1. THE CHAIRMAN. Assuming that there is this correlation between the death-rate and the birth-rate, you seem to suggest that a Commission like this should do nothing in the way of trying to raise or lower the birth-rate. You think that the matter should be left to natural laws?—The thing seems to be directly regulated by a natural law which we do not understand. I maintain that a great deal of the endeavour of the Commission should be to see that all children are kept healthy.

2. If the decrease of the death-rate means also the decrease of the birth-rate, it seems to be against the voluntary restriction of the birth-rate?—We thought that in Egypt, but discovered that a large proportion of the people were natives, and they could not use anything.

3. You are aware that your evidence runs rather counter to the evidence that we have had from societies working on this in connection with the Infectious Diseases Act?—In England the conditions are not the same as there. For example, you are obliged to have prostitutes in a country like Egypt, because, according to the Koran, there must be a prostitute where there are Mohammedans. The Mohammedan law says distinctly that an unmarried man has permission to go outside the village where the prostitutes are, and if you suddenly stop prostitution among Mohammedans, I think there may be very great troubles.

4. You would admit that the data you have provided are data provided in very special circumstances, and it would be very unwise for this Commission to generalise from your data?—Quite.

5. DR. SALEEBY. Your view is that if you lower the death-rate the birth-rate will fall too. Are you aware that the school of Dr. Drysdale say that all such efforts as yours to lower the death-rate are in themselves futile? When the birth-rate falls, the death-rate falls?—No, because the death-rate falls first.

6. You would be surprised if it were possible to quote cases where this correlation does not obtain?—I dare say,

but could you tell me of any place where the death-rate has been reduced like that?

7. Of course you had a great opportunity and wonderful knowledge, but I would suggest that the statement "It would seem that there is a constant correlation between birth-rates and death-rates," is dangerous. Take an extreme case in these islands that happens to be familiar to myself—Bradford—with a steadily maintained or rising death-rate, and notably a maintained infantile mortality rate, and an extreme reduction in the birth-rate. Bradford had last year a birth-rate of thirteen, and a death-rate of eighteen. The previous year it was 14·6. If you compare that with Roscommon in Ireland, where you get a birth-rate of fifty, and an infantile mortality of thirty-five, I suggest, before you can say that is a constant correlation, we must be extremely careful?—You are drawing an example from a small area.

8. Is it not going to be worth while for us to persuade people in Hampstead that where they have one child now perhaps, or none, to have children?—If their circumstances will permit of their having children, the State should recommend it.

9. But that would raise the death-rate?—If you have enormous families it will raise the death-rate.

10. Dr. Pritchard. If one made the experiment of taking Hampstead, and persuaded the inhabitants to have, instead of a family of one or two children, a family of six or seven, do you think that would influence the death-rate in Hampstead?—You must go over the whole country; you must use large numbers.

11. You don't give us mortality figures for this area?—Twenty-eight per cent. of the infants born died during the first year of life, while forty-eight per cent. died before reaching the age of sixteen years.

12. Three hundred per thousand?—Two hundred and eighty-two per thousand.

13. And it came down to what?—One hundred and forty-six. The population of Port Said was just over sixty thousand, but the figures I have given you would be for the whole Canal zone. The births were forty-four per thousand, and it came down to twenty-six.

14. Do you mean that the fall in the general death-rate was immediately shown in the birth-rate?—It showed its effect as soon as the next figures were taken. The figures we had to get in Egypt were always for the whole area. We could get them for weeks.

15. As regards the deaths of males and females in these malarial outbreaks, has not that a good deal to do with the birth-rate? Suppose the women died more rapidly than men, would not that have an effect on the birth-rate?—I don't think there was any difference over that, or if there was, we never heard of it.

TWENTY-FIFTH DAY

Friday, October 24, 1919

DR. C. W. SALEEBY, F.R.S.ED., in the Chair

Statement of ALDERMAN BROADBENT, C.B.E., J.P.

THE whole of my knowledge in relation to infantile mortality was based upon personal experience, and it is therefore inevitable that any statements I have to make must be personal and must appear egotistic. When I entered upon my own efforts to reduce the waste of infant life, there was absolutely nothing available for guidance. It would have been impossible for me to do anything practical had I not had the help of Dr. Moore, Medical Officer of Health for Huddersfield.

The general question of the large number of deaths of infants had often occupied my thoughts as Chairman of the Huddersfield Health Committee, but it seemed an unavoidable concomitant of modern conditions, and, however pitiful, no remedy appeared. Dr. Moore suggested an inquiry into the causes of infant deaths in Huddersfield, and on going into the matter as fully as possible, found that there was a very large percentage certainly preventable. He demonstrated this quite definitely, and at once I recognised that the responsibility of preventing these deaths rested primarily upon myself, as Chairman of the Health Committee.

At my suggestion a sub-committee of the Health Committee was appointed—the Infantile Mortality Sub-Committee. This Committee ordered the Medical Officer to prepare a report, and this was done—I have a copy of the Report. This was early in the year 1904. The Report was presented, but no action followed, as no quorum could be got together. A very suggestive piece of information came to hand in the shape of a Report of a small French Commune, which stated

that for ten consecutive years the infantile death-rate in that Commune had been zero. Still no public action could be taken on account of the Infantile Mortality Committee not meeting. It therefore became an urgent personal question as to whether I could do anything on my own. At this time the Council decided to offer the Mayoralty to me, and, after consideration, I saw that this might be made the occasion for affording help to the babies, and I accepted the opportunity, determining to use the whole force of the position to benefit infant life. Dr. Moore was with me in all this, and together a plan was devised—that of making it a part of the Mayoral opening address to offer a birthday gift of £1 to every baby in my native Ward of Longwood born during my year of office. I took the best advice possible—my brother's and that of many leading doctors in London, to whom he introduced me, and members of the Inter-departmental Committee that had investigated the Physical Deterioration conditions in Great Britain. This involved some months of preparation, but on November 9, 1904, I had everything ready, and made my statement accordingly. The method of making known the offer may be seen best from the cards in which a formal promissory note was embodied, with as much good advice as could be compressed into the space. The effect of the announcement of the scheme was rather startling. The Council was taken aback at first, but it was effectually aroused to take a real interest in infant welfare. The Press, too, throughout the country, and even abroad, took the matter up; it was a picturesque incident and struck the popular imagination. This, however, was only the beginning. The offer I had made gained me the opportunity of coming into personal contact with the homes where babies were born. The promissory notes were delivered by voluntary ladies as soon as possible after the birth, and after a suitable interval I visited the houses myself. The prestige of a visit from the Mayor was a valuable help. To myself these visits were an education, and opened up to me a field of study fascinating in its novelty and interest. I had entered upon a work for the welfare of infancy, very scantily equipped with knowledge, even with all that I had learned from Dr. Moore and my brother and from my reading—I think I may say literally *everything*—that had been published on the subject. I found that in the homes, and by actual experience, I had to correct and amplify all my preconceptions. I consider that I laid the foundations of a real knowledge in the two years' constant study of baby life in the homes. There has been a huge development

since then, and so far as I have been able, I have kept in touch with the whole course of that development.

To return to my own experience. The babies that were born in Longwood during my year of office I succeeded in keeping to a large extent within my own personal observation, through the ladies who had visited them in infancy and through the school teachers.

When the babies born in Longwood were a year old, I had them and their parents in my garden in 1905—the first babies' garden party that I ever heard of—and when the boys and girls were ten years old, in 1915, I had them again in my garden. The results were interesting and in the highest degree satisfactory.

There was an extreme difficulty in finding out when the babies were born, and, at the same time, we knew that by far the largest toll of life was taken at the earliest ages. It became a most urgent matter how to obtain early knowledge of birth, so as to take prompt measures to ensure the most favourable conditions. I made inquiries in all the civilised countries of Europe, and in Japan and the U.S.A., as to the registration of births, with the curious result of finding that in no country except France was there any system of notification. Whether Dr. Moore or myself originated the idea of Early Notification, I can't say. Dr. Moore drew up the clause, and I think I may say that by my authority as Mayor I got it adopted. It is on this Early Notification that all legislative and municipal action for the welfare of infancy has been based.

It was an intense disappointment that the Maternity Benefit in the Insurance Act was left out of all connection with infantile mortality work. It might have been of enormous value, though it is not sufficient to ensure proper conditions before and at birth and the subsequent four weeks. I have personally investigated the actual cost of a confinement in a working-man's home, and I put it at £5.

Out of my varied experience, and subsequent comparison of results, I have formed certain definite conclusions as to the causes of the large infant mortality formerly prevailing. The first and main cause was ignorance, and that ignorance we attacked in every way possible—advice to the mothers of to-day by competent advisers; visiting the homes; helping the mothers in every way possible; sympathetic help. For the mothers of the future—the proper instruction of girls in what they could be taught about babies.

Poverty we found to be *not* a leading cause, but vice of any kind, immorality and drunkenness makes poverty

poisonous and fatal. Bad and faulty sanitation—*e. g.* tub closets and open ash-pits, privy middens—is a deadly cause, especially in hot, dry, summer weather. As a contributory cause, overcrowding and bad housing. Lack of maternal affection is a rare, but most deadly, cause. But in general any substitution of the mother's care is a total mistake.

Where the remedies have been applied in right directions success has been perfectly certain and speedy. Mistakes in direction have caused much waste of effort, *e. g.* milk depots, etc.

The worst mistake that has been made is the misapplication of the Maternity Benefit. The administration has been entirely wrong and the money largely wasted.

The Medical Department of the Local Government Board, in spite of limitations, has done invaluable work. Under the Ministry of Health there is promise of limitations being removed and work rendered more effective, probably at less cost.

1. THE CHAIRMAN. How many babies were there born during that year?—One hundred and twelve received these promissory notes, and the actual number of those who lived to receive the money was one hundred and seven. Ten years subsequently, I asked the whole of the surviving children out of that one hundred and seven to a garden party, and I had then in my garden eighty-nine children who were ten years of age. There were forty-five girls, and forty-four boys.

2. What was the expectation of life at birth?—The statistics show that the number expected to survive the first year was ninety-nine, but one hundred and seven actually survived. Of the one hundred and seven who survived the first year, eighty-seven were expected to live to the age of ten. When I sent out the invitations, I had nine replies from children who were alive and well, but not able to attend. The total number of survivors, therefore, was ninety-eight, of whom I think I may say eighty were well and hearty. Of the others I could not hear of six; I could not trace them at all. I know of two that emigrated, and three were known to have died.

3. You had an early notification of birth?—Yes, Huddersfield provided for the notification of births in 1906, and the following year the Government Bill for optional adoption was carried.

4. The actual cost of a confinement in a working-man's home you put at £5. Is that in addition to the 30*s.*

maternity benefit the woman would get?—I think it would be £5, plus that. I personally investigated the actual costs, and found it to be £5 beyond the 30*s*. maternity benefit.

5. You refer to ignorance as the first cause of the large infant mortality; is that general ignorance?—It is medical and general. Our mortality rate went from one hundred and fifty-three down to one hundred and five as the result of this campaign. Within two years of the beginning of our operations we had got it down to one hundred and nine. Subsequently it has very rarely gone beyond the figure of a hundred.

6. COLONEL BOND. Ignorance was on the part of whom? —On the part of mothers primarily, but there was also ignorance on the part of the doctor.

7. DR. SCHARLIEB. I suppose the midwives were also ignorant?—Yes, they were of the old type that people would now call the handy woman. We have fully qualified medical women to visit the homes within forty-eight hours of the birth of the child. We have always maintained that the first advice should be given not even by skilled visitors, but by medical women, who could, so to speak, lay down the law to the midwives, the mother or the nurse, whoever happened to be in the house. We have insisted more and more on the absolute necessity of the mother feeding her own child.

8. How do you propose to combat that ignorance?—For months I tried hard to get something written of what I thought girls ought to know about babies, but I could not get on with it at all. Then a lady took it up, and wrote a pamphlet, which I think yet is one of the best things that has been written. I distributed about fifteen thousand of them myself. For the mothers of Huddersfield, I prepared what I called "an open letter." As to poverty, I found that poverty was not a leading cause of infant mortality. So many of the homes I had personally visited were poor homes, where there were often a good many children. The baby invariably, even in the poorest home, was always the best fed of that little community. The mother was often a scarecrow, and you could tell that the father did not have enough to eat, and the elder children did not have enough to eat. But somehow or other, whatever was the number in the house, I found that was true in all the cases. It was not poverty that killed the babies, but something quite different.

9. It is most singular that you speak of tub closets, open ash-pits, and privy middens as you do. Do such things

still exist?—They do, and wherever you have them you have a larger death-rate than under the water-closet system. As to overcrowding and bad housing, that has an effect, but it does not seem to kill the babies. You can have crowded houses, where you would think that babies ought to die, but they do not. Lack of maternal affection is rare, but it is absolutely vital. A careless mother in a good house, with good conditions, kills a baby as surely, or more surely, than a very badly-housed mother, under very bad sanitary conditions. I only came across three cases out of more than two hundred and fifty where I should say that lack of maternal affection had resulted in the death of the baby.

10. And your experience of the early notification of births would lead you to go further, and ask for some system of cognizance of pregnancy, or a voluntary notification of pregnancy?—So far as personal experience goes, I think it would be very helpful, but it requires the greatest possible judgment in the way in which the notice would be acted upon, and the use it would be put to. I do think that notification at quite an early stage of pregnancy would be advantageous to the mother if she were confident that the notice would be used in a helpful and not in an interfering way.

11. DR. ROUTH. Didn't you some few years ago rather support voluntary notification of pregnancy? Didn't you rather bribe the mothers by giving them half-a-crown if they did?—Yes.

12. How did that answer?—I think it was first tried in Huddersfield, and the results varied widely there from month to month. On a general average something like thirty per cent. of the births are notified beforehand, with the inducement of this half-crown.

13. Whose half-crown?—The Corporation pay that.

14. The object was to get the women under medical supervision?—Yes.

15. They were seen by a woman doctor, and any necessary advice and teaching was given?—Yes. They were not seen even once, however, except in conjunction with the midwife or the medical man. There is an ante-natal clinic, but nearly all the work is done in the homes. We don't want the mother to come out of the home more than is necessary.

16. MGR. BROWN. What is the average period during pregnancy when the notification takes place?—I cannot say, but I know that it is at a late period.

this part, with the riff-raff, it goes up to one hundred and fifty or one hundred and sixty.

28. THE CHAIRMAN. Ignorance is a less important factor in the existing mortality than it was in 1904?—I consider that in Huddersfield we have simply extinguished ignorance, and the next generation of mothers will know more than ever their mothers did when they were born. Then we shall be able to go on and tackle other things, and with success, I hope.

TWENTY-SIXTH DAY

Friday, November 7, 1919

THE BISHOP OF BIRMINGHAM in the Chair

Statement by MRS. JOHN CLAY

THE Mothers' Union is an association of wives and mothers to the number of half a million in the British Isles and in our Overseas States. As a representative Society of all classes we claim the right to express a direct opinion upon the question of the declining birth-rate, its causes, its fallacies and its remedies.

The present inquiry has been made from a small proportion of members, and only in England, but letters from all parts of the world show that, given time and opportunity, a large collective witness will result.

Opinions so far received are indicated under various headings as follows :—

1. *Reasons for the Limitation of the Family.*

Economic Fears, including the expense of living and of education, and the honest (if mistaken) belief that one or two children have better chances than a larger family.

Selfishness and love of pleasure; the wish to enjoy life without the hindrance or the limit upon liberty of children; dislike of responsibility; preference for expediency rather than for adventure.

Difficulty of house accommodation.

The wish among women to make a career outside the home, to retain individuality, to go on earning, avoiding by such means the monotony of domestic life.

Lack of appreciation of the dignity and holiness of parenthood and of duty to the country in the passing on of life.

Failure to realise the blessing of children or the sadness of a childless old age.

Prevalence of venereal and other disease; spread of the Neo-Malthusian propaganda; opportunities in amusements, games, cycling, etc., resulting in an insufficient guarding of health and in consequent miscarriage; fears of bad effect on offspring of strain on parents during the War; shrinking from the pains of child-birth, especially after a first experience; dread of the expenses of confinement; lack of domestic help; fear that good comradeship between husband and wife should be interrupted; ridicule cast on large families; late marriage; physical effect of industrial work on women; children will not be such early wage-earners in future.

2. *Sources of the Decision to Avoid Parenthood.*

Refusal of parenthood is the result of pernicious literature of many sorts and prices, bad advertisements and displays of contraceptive appliances together constituting a deadly racial evil.

Adverse personal influence from various channels; school companionships; talk in workshops and factories; gossip of neighbours to newly-married couples; open talk of young people before and after marriage on the folly of having a family; example of rich and fashionable people; experience in bad or poverty-stricken homes, inducing young people to determine not to subject others to a like fate; the groaning and pity of old women; and from mothers themselves who advise against children, especially in cases where, owing to lack of houses, the young folk begin life in one room of the bride's parents' home.

3. *Which are Best, Large or Small Families?*

In one hundred and fifteen replies to this question from groups of members and from individuals, ninety-six consider a large family to be the most successful; seventeen individuals speak for the medium, and two recommend the small family. A large family is taken to mean five and over. Reasons abound in praise of the large family, but many give two qualifications: (*a*) the high cost of living makes it impossible to give necessary advantages to more than four or five, and (*b*) that the good large family depends on the good mother.

In the large family children are not so coddled and spoiled, and therefore not selfish. They turn out better, for the necessities of the early training produce better workers. They learn the lessons of self-reliance and co-operation. They enter life having learnt to live with others, to bear

and forbear. They are happier, pleasanter to deal with, less self-conscious, fussy and exacting. They have more knowledge of human nature, and are often of more robust character. They are readier for mutual service, and less self-centred. They are an incentive to one another. The mixture of older and younger children is in itself a good training. Home is brighter and more attractive. Generally there is better discipline. So the children do better at school, both in accepting rules and in games. Intellectually, it may be that they develop more slowly, but eventually they are better for this and their nerves are more stable. Given a good upbringing, the family tie ensures lifelong fellowship and helpfulness among the children and loving care for the parents in later life.

" The single child is in every way handicapped."

The reasons given for the small family are :—

" Advantages in food, clothes and education impossible in the large family."

" The nation will be more benefited by quality than quantity. Ruskin says, ' Better a few good men than a multitude of diseased rogues.' "

Health of the Mother—three extracts.

A collected opinion from thirty-eight groups of women.

" All said, without exception, that the mother of a large family had better health in later life than one who had had very few children or none."

A working-class mother writes, " I have had eleven. All are grown up hearty and a blessing. I myself enjoy splendid health."

The wife of a professional man : " It is a mistake to think a mother must suffer in health if she has many children. Certainly while they are young it is hard work, but she must devote herself absolutely to her home, and that is really a blessing to her in the child-bearing years. I was a delicate woman when I married, but as the children came I gradually improved, and am now really a strong woman. We have ten children, all living, between the ages of twenty and six years."

4. *Is Self-control Possible, Desirable and Effectual in Spacing and Limiting the Family?*

To this question many replies are too vague to be chronicled. But really definite answers, in forty-nine cases are given where self-control had been exercised for longer or shorter periods without bad effect so far as was known. In addition, twenty-two cases have been vouched for where the use of chosen days only during the inter-menstrual period had resulted in avoiding conception.

Other answers say that self-control is desirable but difficult; possible with mutual consent; not possible until a higher standard of chivalry makes it so; not practical until general education is given to that end; only right if for the wife's health; dangerous lest love be arrested.

Some say nothing should be done to space or limit in any case. Many speak strongly against artificial contraceptive methods.

A space of two years between children is constantly given as desirable. "Every two years and leave off earlier." In cases where a mother does all the work, three years is by many thought better. A longer interval is thought detrimental to companionship between the children.

5. *Are Pensions for Mothers Desirable?*

Opinion is divided, with a small majority for pensions. Some think pensions should be given to widows, or to those with very large families only; others that no relief in actual money should be given.

Objectors say State aid would weaken responsibility and tend to waste and laziness. The way in which unemployment pay has affected people is pointed out, and it is thought this helps to show that parents would be liable to use the money unworthily, and to become grasping and irresponsible. A few say that pensions would depress rather than raise the birth-rate. Some think that even if State aid were often misused, the general probable benefit to the child is what should come first.

The majority of opinion is in favour of grants beyond the first, second or third children, carefully secured to the mother for the purpose. Such aid would be a blessing to good parents, would encourage the birth-rate, and would not make unworthy parents worse or more irresponsible.

Pensions are said to be at best but a poor substitute for adequate wages.

With reference to pensions, there is almost one voice for good management as the prime factor in bringing up a family. Obviously, for success management must have a liveable wage to work with, but the point brought out is that money loses much of its value by mismanagement. "Money is of little use to a bad manager, but a good manager can do wonderful things on a little money."

6. *Suggestions for Helping Parents with Limited Means to Adventure on a Family.*

Some need encouraging to think whether they cannot improve their position by their own exertions—by pushing forward and putting in better work.

The National Health Insurance should be reformed and extended to children.

Among men of equal capability, those with families should be given the better posts.

There should be agencies where rich childless people could get into touch with children needing education.

Income tax exemption should be raised for parents of large families. A mother should be able to get complete rebate. Taxation should be heavier for an unmarried man.

The lower middle classes who find it difficult to educate their children should not be rated for elementary schools.

"We have to pay for everything out of £2 3*s.* 6*d.* a week, so when the Poor Rate comes in it does seem absurd."

Parents should be encouraged to insure for education by deferred annuity policies.

The State should give more facilities for education to professional people. Scholarships should not be given only to the best brains. A wrong is done if well-to-do people allow their children to take scholarship pay. More business and training opportunities are needed, especially for girls. The education of all classes together on the American system would help.

The Middle Class Union should exert itself to gain reforms.

7. *Suggestions for Counteracting the Anti-Racial Spirit of the Time.*

Parents themselves must be stirred up and taught to teach the duty and happiness of parenthood. The best teaching is that given by the object lesson of a well-ordered, loving home itself.

Parents should not only be willing and able to answer questions about the passing on of life, but to inculcate that the highest and happiest ideal of the married state is the family trinity—father, mother and children; also that there is a primary duty to God and country in carrying on the creative act. Parents should point to ability to maintain a family as the chief incentive for working to secure a good position.

Teaching in the home must be supplemented by religious bodies, by special classes for older scholars, by mothercraft for girls. Doctors could help greatly. A change in social conditions, and some return to simpler living, would bring out the advantages of home life again.

Good novels, showing the dulness of homes without children and the consequences of refusing parenthood, should be freely circulated. Films of happy home-life would encourage

family life. The lessons of the War as they bear on home and family should be pressed.

1. THE CHAIRMAN. This is a very valuable and carefully-drawn-up synopsis of the inquiry made by the Mothers' Union. What is the Mothers' Union, Mrs. John Clay?—The Mothers' Union is a binding together of wives and mothers of all classes and ranks for the preservation and betterment of the home, and therefore of the race.

2. You have made this inquiry throughout England but not outside?—Yes, but only in a portion of England up to the present. Time has failed me to go further. I hope to be able to go on with it.

3. May I ask if the reasons given here are put down in an order which means that the greater number of people have said it is one or two, or is it general?—It is according to the number I got. I found it a little difficult to give actual numbers, for this reason: a good part of the inquiry was conducted among groups of people. Where inquiry was made in a branch it was no use attempting to get at numbers. There may be a hundred members in a branch, but only sixty present at the time of inquiry.

4. At any rate the economic fear is the main fear?—Quite the largest.

5. DR. ROUTH. May I understand one point? You suggest that it was "for the benefit of the home" mainly that your association existed, and "therefore for the benefit of the race." Is that part of your basis, or do you simply say that? What are the actual words of the basis?—The actual words, I think, would be "for the benefit of the home." Our three objects are to preserve the sanctity of marriage, to bring up the children of the Empire in the best way we can, and to set an example in the homes of a good life. I think therefore, when one says "the home," one means the race.

6. THE CHAIRMAN. Do you find many to confess that selfishness and love of pleasure lead people to control the family?—I mean that the mothers give that as a reason why families are controlled.

7. SIR RIDER HAGGARD. It is a summary of the opinions of your branches?—It is a summary of the opinions we have taken. As to selfishness, you hear people say, "We cannot have a baby, we must have a car, and we cannot run to both." That is a thing one has heard said. It is this growing demand for luxury that is very much keeping down the birth-rate. After that comes the difficulty of housing accommodation.

8. What class are you referring to, then?—I am referring

to the general lack. In regard to the question of landlords refusing houses to those with families, that would be in the way of house accommodation for the working classes. But the pressure is felt in many other ways. After all, children must have somewhere to be born.

9. Dr. Schofield. The Mothers' Union does not touch anything above the working class and the lower middle class.—Oh yes, it does. We have members of every class.

10. Sir Rider Haggard. When you say "lack of appreciation of the dignity and holiness of parenthood, and of duty to the country in the passing on of life," and when you come to have crowded rooms, and no comforts, can you quite imagine their understanding the dignity and holiness of parenthood?—That is all the more reason why they should be taught it. The anxiety about ways and means turns out to be very over-rated. The needful frugality may be not only possible but beneficial to both character and happiness. It is understood, and I hope that will be quite realised, that the old remark "God never made a mouth but He sent a spoon," is overdone. We do feel that has gone too far in one direction; but the other direction is "nothing venture, nothing have."

11. Are you here referring to the whole problem or to a stratum of society?—To all classes, excepting the really rich.

12. Dr. Routh. Some of these things—selfishness, for instance—must apply to the rich?—Yes, to all. Then there is the failure to realise the blessing of children or the sadness of a childless old age. And there is the spread of Neo-Malthusian literature. Here is a letter from a woman: "When I had been married about a month I got a letter from a firm in London saying I was probably realising by this time that I did not want any children, and that they could tell me what to do to prevent it, and that I need not tell my husband that they had written. Of course, I told my husband, but he said we could do nothing in regard to it, as it was too carefully worded."

The fear that good comradeship between husband and wife would be interrupted was expressed a good many times in letters. Now there is so much equality between men and women in many different ways—in mental habits, games and so forth—that they become afraid that children will make such a difference to their companionship.

13. Sir Rider Haggard. You say, "Refusal of parenthood is the result of current pernicious literature of many sorts and prices, constituting a deadly racial evil." What

do you mean by that?—I include not only stories, but the cases you see in the papers of all kinds and sorts—divorce cases, the undesirable articles that you read probably a good deal of in papers which have an enormous circulation.

14. How does it work round to parenthood?—They want pleasure, and say that they do not see the use of having children; that life is altogether better without them. There is also a great deal in novels—you can hardly put your finger on it, but there is a great deal in current literature against having children.

15. THE SECRETARY. You mean that there is the creation of an atmosphere against having children?—Yes, and in the stories there is not enough made of the love of home and family and the joy of parenthood.

16. SIR RIDER HAGGARD. As to which are best, large or small families, there is no reason why a few children should be coddled more than a large family?—I think there is a growing care in the treatment of children. One reason why a large family is better is that they are more regular in their habits. They get their meals more regularly and they are not so much with their parents, the bigger ones look after them. Some children have a great deal too much done for them. I have had a very large number of letters speaking of the joys of large families, and saying that people do not know what they are missing. Of course, there was a little testimony in favour of a smaller family. Very few reasons were given, however, as to why that was better—there was more money to go round, more food and so forth. I think the testimony I got about the health of the mothers was the most interesting. That itself came directly from the homes, and many examples referred to the good health of the woman who had a large family. Then comes the question of self-control. People talk about it vaguely; the more refined and reticent people are very careful what they say, but I have here a list of cases absolutely vouched for. These are where self-control has been used without bad effects, and they tend also to show that there is at least some immunity in certain days in the month.

17. Do you think that is common enough—this that you call self-control—that it is worth going into, human nature being what it is?—I think human nature is assisted to this end. We have really to find out what is in human nature before we can say anything otherwise. For instance, I am sure there is an immense feeling in the country against contraceptive measures. They are regarded

with great horror—as an unspeakable thing. This is very strong indeed in the working classes. Some speak of it as a criminal thing to employ those methods. When you were saying, Sir Rider Haggard, about human nature being what it is, I thought of a remark made to me by a working woman in the course of this inquiry: "Many a partner would be good if his wife would let him be, but men get 'classed' for it when they ought not to be." The woman who said that gave me to understand this: "You talk about men being always at the back of this business, but it is sometimes the woman; it ought not to be all put on the man."

18. Do you mean in regard to having children?—I mean when insisting on marital rights in and out of season. Another woman said: "Most husbands would give their wives a rest unless they were drunkards," her meaning being that drink and lust go together.

19. THE CHAIRMAN. Now I think we can go to No. 6: "Among men of equal capability, those with families should be given the better posts." How can that be done?—We have got in *The Times* to-day the particulars of the advance they are making in New South Wales.

20. Does the Mothers' Union commit itself to what you have put your précis—"The education of all classes together on the American system"?—It was expressed, and I give it simply as an opinion.

21. DR. ROUTH. You speak of the wish of a woman to go on earning after she is married. I suppose that means that the idea is by both husband and wife earning a wage they can live more comfortably, as well as other things?—I think so, and I also think there is a good deal in the desire of women for economic independence. There is a wish to feel that they have money in their pockets that they have earned themselves.

22. "Prevalence of venereal and other disease"—Is that simply expressed as an opinion because there has been a great deal of propaganda throughout the country and people are beginning to see that it is a racial danger? They do not think they are likely to marry a man with venereal disease?—No.

23. Then I do not see why that should come in here. It is a cause of the low birth-rate, but it is not a reason for refusing parenthood.—I did not mean it in that way; it means that families are limited in size, and this is one reason for it.

24. As regards No. 2, "Sources of decision to avoid parent-

hood," I thought the first paragraph as to literature referred to contraceptive literature?—That is included.

25. In the next paragraph you say, "Bad advertisements and display of contraceptive appliances." You think they do harm?—I think that sort of printed matter would be included in the pernicious literature. I think they see the bad advertisement in the newspapers, and when they see these things in the shops they are tempted.

26. Under the heading "Income tax exemption" you say, "Exemption should be raised for parents of large families"; then you say, "A mother should be able to get complete rebate." What exactly does that mean? Is it that the mother with one child is to have no income tax?—I think the idea would be that in the case where a mother was doing her duty, it was hard that she should have to pay an income tax if she happened to have a little money.

27. Then you say, "The lower middle classes, who find it difficult to educate their child, should not be rated for elementary schools." What does that mean?—When people send their children to some school a little above that, they have as much as they can do to pay their way, and for that reason they ought not to pay for their rather poorer brethren.

28. As regards housing accommodation, there is no doubt, I suppose, that if it ever comes to be that there is sufficient house accommodation, that reason for limitation would cease?—I think it would be very great encouragement.

29. As regards mothers being taught, and teaching their children, it is being adopted in the country, I understand, that mothers should be invited to go to mothers' schools and learn, and even to attend the class of the schools when the physiology lectures are being given?—I have heard that. Several people have said that there ought to be much more compulsion about mothers going to clinics, and that the State ought to take it up, and not only give them the opportunity, but see that they take it.

30. Sir E. Brabrook. Is it not a good thing to have a large family because it teaches itself and manages itself to some extent?—I think so; it makes a little world in miniature to begin with.

31. Miss Michelmore. Here you say, "The National Health Insurance should be reformed and extended to children." You think the working class do not love the Insurance Act?—I think they consider it wants reforming.

32. You think they would like it extended to the children?—Yes; some have expressed the opinion that it would be very advisable if children were examined by a doctor who

would put them in classes of health, and there would be less subscription when the children were doing well.

33. COLONEL BOND. Mrs. Clay spoke of love of pleasure supplanting natural affection. I do not think we ought to lose sight of the biological element in this problem. Will not that automatically right itself? Women will survive and children will be born to those in whom natural affection does survive. The people who would make the race of the future would be those who had affection?—I am afraid that even some of those in whom the love of children is strong are not having children.

34. DR. SALEEBY. In your précis is the statement that thirty-eight groups of women gave a collected opinion, and that "All said, without exception, that the mother of a large family had better health in later life than one who had had very few children or none." One would like to be sure whether women were included who had small families? Were they asked?—Yes.

35. These were strong, healthy women who have had these large families. Have you taken any sample from the other side?—Not from the small families. I had a certain number who said that the mother's health had suffered, but they were few. There were a number who said that it gave mothers a better chance in middle life.

36. What is your own opinion as to the endowment of motherhood?—I think that where the control is good some sort of a pension would assist very much. I am also inclined to think that where control is weak the State ought to have the right to come in and take some account of it. It would give the nation the right to see that its children were properly brought up.

37. You regard it as necessary, but that it should be hedged round with precautions?—Yes; on the whole I think that is the better thing.

38. SIR RIDER HAGGARD. As a matter of fact, does not this business press very differently upon the two great classes of society? In the working classes every child is an asset as soon as that child becomes an adult; but in the better classes is it not so much the reverse? Their children have not the advantage of free schools, free doctoring and other helps, and is it not a fact that in the matter of these professional classes it costs hundreds of pounds a year to educate each child, and when the young girls grow up, if they find no husbands, they have to be provided for as they must not be left to sink? Is not that true?—I think it is certainly true.

39. Is it any wonder that in the upper and professional class people shrink from bringing children into the world whom they cannot educate, especially bringing girls into the world, unless they know they can endow them if they do not marry?—It is a thing that is weighing very largely on the professional classes.

40. Is it not possible that it is a totally different reason at the bottom of their minds than these you put—of selfishness and so forth? Is it not simply a dread of leaving these offspring to the world, and to see where they are going to sink?—There are a great many of them that do not sink.

41. THE CHAIRMAN. The more people rise above the working classes, the less opportunity they have of doing something for their children, and this is the reason, and not a lack of desire to have children.—I know many feel the greatest desire to have more children.

42. SIR RIDER HAGGARD. You mean that this is the reason, and not the selfishness of the population?—Yes.

43. People give various reasons which check parenthood, but did it ever occur to you that one might be that many people fear they might not be bringing happiness into the world, especially among those who have no religion? They see nothing beside this sordid life, and refuse to bring others to pass through it with no hope of anything beyond?—I have never known a case.

44. Then you have mentioned the matter of health certificates for marriage. Does your own experience lead you to think that this country, with its individualistic outlook, would stand the introduction of what you call "Health certificates before marriage," which would involve an examination of both parties, male and female, before they were allowed to proceed to marriage?—I think it might gradually grow. I think the best people would be ready to do it, and I think it would become the fashion after a while.

45. "Gradually grow." Do you think the growth will be fast?—It may be slow; but the growth of most big things is slow.

46. It will involve examination for every young girl and every young man?—I don't know what the doctor will say about it, but it seems to me that that would not be a very terrific thing. I speak for myself, and I would not allow any man to marry a daughter of mine unless I had a doctor's certificate to say that he was physically fit.

47. DR. SCHOFIELD. You say, "Taxation should be heavier for an unmarried man," while in the first clause of

the same paragraph you say, " Income tax exemption should be raised for parents of large families." You mean it should be altered not for the married men, but for fathers? Is the mere question of marriage to alter it, or is it fatherhood?—It should be fatherhood.

48. And the subsequent paragraphs are meant to tend in the direction of relieving the financial strain on the parents? —Yes.

Mrs. John Clay. May I put on record my general conclusions? Though the country absolutely must have more children, little is being done to encourage the best producers to have families. Those who have had one or two favourable children are the very people to go on having more, and it should be made possible for them to do it. We must certainly spread through the land, and bring before all, that capable children are the best wealth of the country, and we must urge the State, which needs the children, to take a share in helping to rear them. But neither arguments nor promises of social help will do much to stimulate potential parents to accept the duty to race and country of having children, unless a great idealism is revived or created. Parents must be inspired with the possibility that amongst their children there may be those whose names will endure to the glory of their God and country. Only by such an emotion will the rising generation be carried beyond personal considerations to a true patriotism, and to arouse this must be the aim of all who have vision for the future.

Dr. C. W. Saleeby *submitted the following précis* :—

During a tour of observation undertaken in May and June of this year, in relation to certain medical and eugenic developments in North America, I attempted to collect such data and make such observations as might help the work of this Commission. They are as follows, in brief summary :—

In Canada, the paucity of population in proportion to the illimitable potentialities of the country must impress all observers, and is commented upon by all with whom one converses. Here, as in Australia, we own but do not occupy, police but do not people, an empty Empire. My comparative map of Empires, published in 1910, and submitted to this Commission in 1915, is to-day more significant than ever as a result of the War and the still-falling birth-rate. During the years before the War about two hundred thousand Americans were immigrating into Canada every year, rapidly accelerating its doubtless inevitable Americanisation.

The relative fewness of women is as marked as ever, lending continued force to the contention, which I have made for more than a decade, that we should encourage the movement of women—but not of men, whom we cannot spare—to Canada as a prime principle of intra-imperial migration. The contention that this is a cruel policy of exile cannot be maintained, in view of the deplorable and oppressive excess of women here, and also—as I pointed out in public, both in Ottawa and Toronto—in view of the safety for women in general, and mothers in particular, which is involved in the attitude of Canadian public opinion towards alcohol and its dangers—an attitude overwhelmingly confirmed by the result of the recent referendum in Ontario on permanent prohibition.

In the United States, as in Canada, there is a continuous decline of the birth-rate among the Anglo-Saxon or English-speaking people. The contrast between English- and French-speaking Canada in this particular is most marked, and suggests that this Commission might inquire further into the exact and momentous influence of religion upon racial survival. Such an inquiry would reveal parallel results in the mixed population of the United States.

The *avowed* and *explicit* movement for so-called birth-control in the United States is probably of very small importance compared with the economic and psychological factors at work everywhere. *The Birth-Control Review*, a copy of which I purchased in Broadway, is not concerned with the supposed " law of Malthus," like the " Malthusian " here, but is violently feminist—or, rather, anti-masculine—and concerned with the wrongs and rights of married women as against their husbands.

I anticipate, at an early date, much repression of venereal disease in the United States, *in so far as* that is dependent on explicit prostitution. In many cities of the twelve States which I visited, I was shown districts which had been " red-light districts " until the advent of prohibition, but which had thereafter ceased to be such. I should find it hard to over-state my opinion of the importance, for racial health in especial, of the policy of constitutional prohibition which will come into force in the United States next January.

At the Children's Bureau in Washington, which is the statistical and research centre of the entire Union, I learnt that the control of infant mortality in the United States has had the same results, during the present century, as here, *i. e.* the mortality during the later months of the infan-

tile year has been greatly diminished by the mastering of summer diarrhœa; but what Dr. Ballantyne has taught us to call the neo-natal mortality has been but very slightly abated. The attack upon that, by means of control of what I call the "racial poisons"—the venereal diseases and alcohol—is the task which is now being taken in hand.

The particular form of infant mortality known as "over-laying"—by which is meant "overlying"—was especially investigated by me. I took over with me the admirable figures resulting from the work of our Central Control Board (Liquor Traffic), and quoted by Dr. Sullivan in his evidence before this Commission. Inquiry showed, however, that "over-laying" appeared to be unknown in the United States. This was so in each State I visited. At the Children's Bureau I was informed that it was unknown. Being incredulous, I wrote to the Children's Bureau after my return, and asked for an extended inquiry and a considered reply, which I have now received. "Over-laying" by drunken mothers appears to be absolutely unknown in the United States, and the official letter adds that "maternal drunkenness is not a real problem in the United States." Happy and safe the nation and the race of which this can be said.

I also visited the laboratory of Professors Stockard and Papanicolaou in New York, to see their seven-year-long and continued work on alcohol and its racial consequences to guinea-pigs, quoted by Dr. Sullivan before this Commission, and I have to record the highest opinion of its thoroughness and veracity, which have been questioned here by critics who have not seen it for themselves, and wish also to record my thanks to Professor Papanicolaou for his patience and courtesy before my prolonged and seemingly hostile cross-examination on his methods and results, and for the freedom with which he showed me everything.

Rickets, "the English disease," as it is called on the continent—a disease which, amongst other results, often lowers the birth-rate by its deformation of the female pelvis—is practically unknown in North America, except amongst a few very poor negroes in New York, amongst whom the mothers are fed almost wholly without milk. This absence of rickets, of which disease I saw no evidence in Canada or the United States, north, south, east, or west, is doubtless due to the high proportion of milk and its products, said to constitute fifteen to twenty-five per cent. of the average dietary in the United States, and the consequent abundance of the anti-rickitic "accessory factor," or so-

called " vitamine," which the cow derives from the grass and other green vegetables that she consumes.

The movement for " Mothers' Pensions," which has been discussed before this Commission by Judge Neil of Chicago, its founder, and Judge Lindsay of Denver, appears to be extending rapidly, and everywhere to have the support of public opinion.

Both in Canada and the United States the importance of the " population-pressure " already incipiently exercised upon those countries by the teeming population of Japan, is acutely and increasingly recognised, and I am confident that both our own Dominion and the United States would gladly co-operate with us in any steps, such as the migration of women, which may help to relieve them from what they cannot but regard as a menace to their racial integrity, and to the social ideals which they derive from ourselves, and of which they are our co-trustees.

THE CHAIRMAN said: The Prime Minister of Quebec told me that the children there were so numerous that they had given up their money grants to those who had twelve or more children. There were now so many children. As to the suggestion that the Commission should inquire further into the influence of religion on race survivals, certain ecclesiastics told me that the reason why they objected to their people going to the War was not that they did not want them to fight for Britain, but that they were afraid of these people losing the primitive sense they had before. They were afraid of what would be the result of their getting into touch with modern ideas; they were afraid that it would spoil them, and I have no doubt it would have had that effect.

1. THE CHAIRMAN. You say nothing here about the presence of venereal in Canada. I got a good many letters during the War, several from mothers asking if nothing could be done to prevent their clean boys from coming home dirty, and a danger to the Dominion. Was there very little venereal in Canada?—I was astonished at the widespread prevalence, according to the reports, of venereal in Toronto. (I should suppose that these mothers were rural mothers.) I did not realise that venereal disease could be so prevalent there. I had always thought of Canada as virgin and clean, but it is not unlike our own city.

2. COLONEL BOND. And in Australia?—The clean-boy theory may to some extent be overstated.

3. In the second paragraph, in drawing attention to the emptiness and the wonderful way in which the Americans are filling it up, I do not know whether we realise fully enough

that it has been really the case with every country. There was a time when we were empty and had to be filled up. It is nothing unusual, this wanting to be filled. The problem is as to the willingness and the cleanness and the quality of the people going there. We want to put our equilibrium right in recognising that this problem is really going on throughout the whole history of the world. Which races are to occupy the still unoccupied parts of the world? The yellow peril seems to be a very real thing when you get to North America.

THE CHAIRMAN. Another thing we have to bear in mind is that they have been populated from all parts of Europe with some of the most undesirable people.

4. COLONEL BOND. As to the mortality, is it three-fourths or one-half due to racial poisons? There has been a great improvement, has there not?—My opinion is that the statistics hitherto collected do not bear any relation at all to the hitherto published facts. In the returns syphilis is given the second smallest column of all as a cause of mortality, whereas you find a very large column called "congenital." When we get beneath this you get to the root of the trouble.

5. With regard to that very interesting paragraph about milk and the absence of rickets. An enormous lot of work has been done in the last twelve months on this question of analysing the vitamines. Does Dr. Saleeby now say, or are there any statistics which show the average consumption of milk in the juvenile population of America as against England or Canada?—I have none, and I do not believe that there are any, but I do believe that the discrepancy would be absolutely astonishing. I saw more rickets in the ten minutes I was on the quay at Liverpool when I got back than I had seen in all the time I was there.

6. SIR EDWARD BRABROOK. In your remarks about overlying, does that apply to Canada as well as the United States?—I could not get any record of it.

7. Did it apply to America before prohibition, or only since?—I believe it is quite independent of the prohibition era. It would seem that their women have never been drunkards. I was taken to some of what were called typically very bad saloons in Chicago, and I saw no woman in any instance, either inside the bar or in front.

8. MISS MICHELMORE. Is it not possible to offer greater facilities to women to emigrate?—I am of opinion that we are going to deal with that in the forthcoming report of the sub-committee.

9. I have been making inquiries among women. There are

thousands of unemployed women now, and it is very difficult to fit them in.—Canada would shout for them.

10. DR. ROUTH. I was wondering whether the second and third paragraphs taken together were not rather encouraging the emigration into Canada of foreigners, including Americans, though we try to prevent our men and young married couples from going there. It seems rather a pity to discourage men from going. Don't you think that it is a good plan that newly-married couples should go there?—I would not like to say that I would discourage newly-married couples from going there, but I should say that I am basing my opinions on the Dominions Report. If you take men of the most active age, we have none to spare in this country. Even from a military point of view, it is questionable whether it is safe to reduce the garrison of men. I believe the forthcoming census figures will be surprising by the paucity of men that will be revealed of an age from eighteen to forty.

11. If we are not to populate our own Dominions with our own people of both sexes, it is encouraging the Americanisation on the one hand, and the Japanisation on the other?—The whole population is so small that there is not enough human material in the Empire to do what is necessary, but if we provide wives for the men in Canada, then we may hope for children of both sexes.

12. As regards the sixth paragraph, would it not be possible to give the names, or is it better not to do that? I think it would add very greatly to the value of the statement if you could state that you had found that these "red-light districts" had ceased to exist?—There are so many, and there were thirty-six States in which I did not go. It was a general experience. There is no need to mention names, because they could be duplicated or triplicated by people who went to other States.

13. As regards the last paragraph, do you mean that if proper women do not go out there, that the Japs are going to marry into the United States and Canada?—No, I do not, because the opinion there is extremely strong against it. I mean that the pressure of Japan, the population of which, I am told, has reached seventy millions, and is intensely crowded together in the northern border of North America, will become almost irresistible.

14. MRS. JOHN CLAY. With regard to providing wives, an enormous number have gone since the War, both to Canada and our other Dominions. It runs into a very great number—thousands of girls who have married or have gone out to marry.—Dr. Snow's estimates were that there were half

a million marriageable women in England who would be much more advantageous to the Empire in the Dominions. That half-million was based on pre-war figures, but since that estimate a much greater number of women have no marital prospects. A million men have died in the War.

15. THE CHAIRMAN. Are these half-million of marriageable age?—Yes.

16. MRS. JOHN CLAY. About overlying. Has it been brought out at all about the enormous reduction that there was in England during the period of liquor restriction?—I believe it is known, and very widely indeed. I was so struck with the reduction that I had a diagram made, and I showed it to audiences, who were horrified. I afterwards had to drop it.

17. DR. SCHOFIELD. You ask that five hundred thousand women should be sent to our Colonies, to marry whom?

DR. SALEEBY. I did not go so far as that. I quoted Dr. Snow's figures, made for the Dominions Royal Commission, as to the disproportion before the War. The answer to your question would be, they would marry Canadians if they went to Canada.

18. But they are not there to marry. The female population of Canada is greater than the male at the moment. The proportions are almost the same as in this country. It is the same in Australia. If that was the case before the War, I do not know what it would be now.

19. How many Canadians were killed in the War?—I forget the total, but there are many more women than men. These are this year's figures, issued by the Commonwealth offices. They show that the proportion is as one hundred men to seventy women. In other places you get one hundred and two women for one hundred men.

20. THE SECRETARY. Is not the policy of the Salvation Army the best—to emigrate by families? They have been up against this proposition, and their agents tell me that they do not encourage the emigration of women unless they are single women. They prefer to emigrate by families.—It is right for them, but can we spare the men from England and industry?

TWENTY-SEVENTH DAY

Friday, November 21, 1919

THE BISHOP OF BIRMINGHAM in the Chair

Witness: MR. W. L. GEORGE

1. THE CHAIRMAN. You are an author of distinction in economic and other matters?—I do handle these things.

2. You are a determined opponent of what is called a high birth-rate?—Yes. The birth-rate should not be considered by itself; it is part of the general question of the birth-rate and death-rate. It is more correct to concern oneself with the balance of births and deaths.

3. Is there any reason why the death-rate should be high where the birth-rate is high?—The level of prosperity is lower and the conditions under which children grow up and children survive are worse when the birth-rate is high. The arguments should rest on the balance, and you have particularly to take into account that where the birth-rate is high, infant mortality is generally high. There are perhaps a few exceptions that arise in country districts particularly favoured by atmosphere, although, in general, mortality in the country is just about as bad as in the towns, because though the conditions may be better, there is little access to doctors, chemists and so forth. Compare the birth-rate of Hampstead with the birth-rate of Dewsbury, and you will find a rather higher birth-rate in Dewsbury, but also a higher death-rate.

4. Would it be unfair to say that the amenities of Dewsbury are not very great, and therefore would there not be a greater concentration even upon sex life than where there is a great deal of open space?—That I cannot say. I confess I have taken Dewsbury because it is the worst place for infantile mortality, with the exception of a sub-district of Croydon. A high birth-rate is inimical to social progress, and by social progress I mean general culture. I would suggest that in a country with high birth-rate illiteracy is much more frequent. I have taken seven countries, three with a high birth-rate, and four with a low one. You have the following results: England and Wales—the figures are per thousand—a birth-rate of 23·8 and illiteracy 20. These figures will be subject to correction, because they were obtained during recruiting. In France there is 18·8 birth-rate and illiteracy is about 25. Belgium, with a birth-rate

of 22·6, has an illiteracy of 92·4, and Sweden a birth-rate of 22·4 has an illiteracy to 3·1, if you include people who cannot write. Then we take the high-birth-rate countries. I would like to say that, being anxious to make a fair comparison, I take two countries practically Roman Catholic, the Roman Catholic countries abroad having an education which is approached on the theological rather than on the cultural lines. I submit that in the high-birth-rate countries there is at least a very strong presumption that a high birth-rate coincides with a low level of culture and education.

5. What would you call the connection between the two things?—In a country of a high birth-rate you find social chaos, a difficult labour situation, fluctuating populations—sometimes nomadic—and that is extraordinarily prevalent in Italy. The general conditions are unfavourable, and there is also a downward tendency of wages. When the wages are low the tendency is to swindle the school inspector, and to use the children for earning money. There is an opportunity of using low-paid labour, and so the efforts of the employer are always rigged in the direction of maintaining his power. The higher the birth-rate of the country, the lower it keeps its children. The higher the wages, or the higher the income, up to a certain point, the higher the culture. I know there are thousands of exceptions, but in the main this is true. In our own country you will generally find that in families of the same class a family of two children is given very much more culture, more education, than in those where you have seven or eight.

6. That is another thing. If we come to the bedrock difficulty, it is that if there were money enough to go around, the question of the height of the birth-rate would not arise?—It is a condition that has not arisen yet.

7. What I am trying to elucidate is how you connect the high birth-rate with these unsatisfactory conditions you speak of. Is it not that there is not provided for a large number of children what is provided for a small number?—That is possible, but it is a hypothesis. I do not know, although for my part I do not think it likely. I think the high birth-rates and high death-rates go together, and a high infantile mortality has a demoralising effect on the individual. The high birth-rate tends to coincide with a low level of comfort, and tends to a decrease in trade. I am taking the trade per head during the last year (pre-war each case). These are the figures in the low-birth-rate countries: England and Wales £38; France £14·9; Belgium £47; and

Sweden £15·8. Against these I take the three high-birth-rate countries: Russia £14·9; Italy £8; and Roumania £6·8. I am conscious that to a certain extent it is not absolutely fair to compare these countries together, because three of the low-birth-rate are industrial, whereas out of the high-birth-rate countries two out of the three are not industrial, but we find that the difference is as great as £47 in Belgium and £8 in Italy, both being industrial countries to a certain extent. In a country of low birth-rate you have a population that is better educated and better trained, and therefore capable of producing more.

8. DR. ROUTH. Why did you leave out Germany? It was a country with a very high birth-rate before the war, and a very large trade?—Because I was choosing some extreme cases. I have chosen the countries with the highest and the lowest birth-rates. I have figures showing that the excess of births in Germany has been going down. I was going to consider the point I made about the trade. I have taken the United Kingdom and considered the total trade year by year from 1897 to 1906. I find that in 1897 British trade per head was £18 12*s.* 9*d.*, and ten years later it was £24 9*s.* 7*d.*, and yet this included a period of depression following the Boer War. National trade was rising thirty-two per cent., although you could not expect it, trade went up, and in spite of the fact that trade went up the birth-rate did not go up much.

9. DR. SALEEBY. Are these figures for export trade?—For import and export—the total trade.

10. Would you say that emigration from this country has interfered with industrial development?—Considering this country to be over-populated as well as ill-distributed I should say not, but one has to consider the quality of the emigrant before one says that—that is to say, that if we emigrated a hundred thousand skilled artisans, as opposed to a hundred thousand convicts to Botany Bay, it would be a different case.

11. If you retained the skilled artisan, and emigrated those who are not fullest able to take their places here, are you doing the country any harm?—I am not suggesting that the population of the country should be purposely reduced, but at bottom I do not think it matters very much. The methods of technical training now are so good that there is no question of loss. One could fill the gap. I do not suggest that childlessness is desirable in any woman, but a large family does tend to monopolise the attention of a woman to such an extent that she becomes nothing but a

bearing animal, and later on a carrying animal. I am only taking the position of the working woman, and the present system tends to brutalise her.

12. Would you say that in the scale of humanity she goes down very much in regard to men?—That is a question of experiment, but my feeling is that there is a steady rise in human values, and a rise of both sexes, but whether man is going ahead faster than woman, I do not know.

13. Would you say that the average man, from the point of view of breadth of outlook, is greater than the average woman?—If it is understood that that breadth is extraordinarily narrow, I should say yes.

14. DR. SALEEBY. You say that the only possible advantage of a high birth-rate is to supply a sufficiency of cannon fodder. In any country, in a full country, or in what kind of country? Would that be so in Canada?—I am considering the country which is in a medium state of development. If you put the position of a virgin country such as Canada, I should say it does not do any particular harm in Canada, but there is plenty of time to develop the world.

15. That is assuming that there are no Japanese trying to crowd in?—The Japanese must get in somewhere.

16. A yellow Canada—do you view that with equanimity?—Your point of view of the Japanese is grounded on the continuance of their high birth-rate. I have one more point about emigration. I was suggesting that high birth-rate produced pressure inside the nation. Either you have a high national pride or a low national pride. You get relief in emigration if you have a strong national pride, such as the British, Germans and Japanese, and after a time, when the people want to emigrate, the Government tends to object and the effort is systematised. The outlet is not sufficient, and the result tends to war. Any measures intended to encourage infant birth as against infant survival are anti-social, and should be dropped.

17. What do you mean by infant survival?—I mean all measures tending to preserve and make the best of the children we have, such as the Welfare Movement. Compulsory feeding should be maintained, but I do not think that any artificial premium should be given to births in general. For instance, I am not suggesting that the income tax reliefs should be dropped. That affects a class which is looked upon as a desirable class—the superior artisan and the middle class. I am merely suggesting that artificial enhancements should be avoided. A typical case is the endowment of motherhood.

18. SIR RIDER HAGGARD. You object to that?—Yes, because I do not think it would encourage births amongst the most suitable elements in the community. During the War we gave first of all 5*s*., and then I think it was raised to possibly 7*s*. 6*d*. Suppose it was raised to 10*s*., that means that you have to give every child £26. That is £26,000,000 a year for the first year. If you go on with it to the age of fourteen, and knock off a little, say ten per cent., that means 300 millions for the Chancellor of the Exchequer. If you give an endowment of £26 per child it would be absolutely no good, except to the most thriftless and most sickly among the population of the country. It would do no good to the man of the middle class and the artisan earning five or six pounds a week; it would not be quite enough to be of any use. You are offering a sort of premium to people of whom we have already too many.

19. Supposing instead of the State having nothing to do with this matter, except to see that the children were well-looked-after, and people were paid properly for a reasonable family, is not that better than the State doing nothing at all in the way of pecuniary help?—The effect of that has been noticed in the figures of Port Sunlight, where the higher the position the less the family. If I had known that question was going to be raised I would have brought the figures with me.

20. THE CHAIRMAN. You say that "the present moral attitude against the dissemination of popular knowledge of contraceptives is unreasonable." Is that general knowledge?—Yes. I think in general there is a feeling among sections of the nation that are interested in moral questions that it is unfortunate that these things should be hedged and surrounded as they are. The National Council of Public Morals has got to make up its mind to one of two things—either that every woman must have a child a year for a good many years, or she must prevent some being born. If she prevents some being born, she must have knowledge of these things.

21. Does anybody contend that a child should be born every year? The contention of many great doctors is that with proper care and spacing and proper bringing up of little children nothing like one a year—it is more like one in two or three years, which is the average. Is not that more what people say?—I spoke loosely when I said one every year. I think the doctors will agree that the immunity during lactation is not more secure than the immunity which is given at certain periods in the month.

22. You recommend that the clergy should give every couple they marry a book on Malthusianism?—It is the only way I could think of of getting the matter into the hands of the public. I am there speaking of the clergyman, not as a minister of the Church, but as a public official.

23. Then I notice you say that the Bishop of Birmingham thinks that we ought to exercise a certain amount of unselfishness in our relations one with the other. May I ask what your objection to his point is?—I remark on the Bishop of Birmingham's meaning that his guidance is not sufficient. The Bishop of London was asked a question on this matter some time ago, and he said: "You must use restraint." It is not clear. It only needs one act of intercourse to produce a child. If the Bishop meant that intercourse should only take place when a child is desired you must exercise restraint. If the knowledge of contraceptives is not spread you have to face another problem—that is, abortion. The less contraceptives there are the more abortion follows. It is particularly well known that there is an enormous amount of abortion by means of penny-royal, ergot and other things. Yesterday a man was sentenced for having performed acts of abortion on four women, and the newspaper reports go on to say that at the time he was arrested there were twelve women waiting their turn. That gives an idea of the spread of this.

24. Is it a fact, so far as you can make out, that where contraceptives are not used there is more abortion?—I am quite sure myself.

25. DR. SALEEBY. I should have thought that where contraceptives are available there is no need to resort to abortion. Among savages, where contraceptives are unknown, abortion, or even infanticide, takes place.—That is an important point on my side. As regards contraceptives, usually contraceptives do not fail if scientifically and properly used. Every one knows that who has experimented with them, say for twenty years.

Now, taking the last point of all, that is, the competition in population between this country and other countries—I suggest that if you take the most marked of all birth-rates, the most marked in this case, because they are the most dangerous potential enemies, the Japanese—you find that even in Japan there is a decrease in the birth-rate. The census of 1913 showed that the birth-rate was going up by 15·99 per 1000, but the years after that show a decline. I would like to point out that if we compare just two periods, say the five years of 1886 to 1890, and 1906 to 1910, in the

three countries which have the highest birth-rate, where the figures are reliable, we have a falling off. We find Roumania falls from 40·9 to 40·3, Hungary from 43·7 to 37·2, and Spain from 36 to 33·6. I want to suggest that there is no particular reason to fear that this country will suffer very seriously from a falling birth-rate unless it falls in an extremely swift way, because other countries, particularly those with a high birth-rate, are beginning to fall simultaneously.

26. DR. GARVIE. You don't pretend that these figures represent an unavoidable consequence, but that they are only coincidences? — They are almost invariable coincidences.

27. You don't suggest it is due to general conditions? In a country like this, which has other vast countries dependent upon its over-population for their population, you would not regard emigration as an evil, would you?—No.

28. Would you say that as a general rule the mother of a large family was culturally or morally inferior to the mother of a small family? Would a woman with six or seven children be inferior to the woman who has only two?—Among the poor, yes.

29. My experience amongst the Scotch poor is entirely different. And then I speak as one who knows Russia; that does not bear out your contention. They had no ammunition, they fought well, and could not have fought better.—If you wish me to deal with the point about Russia, I would say that you would find the same thing applying between the Japanese and the Chinese in 1907. You had also the same thing in the Napoleonic Wars.

30. Apparently your admission that it is not an inevitable sequence somewhat weakens my criticism, but I would like to call attention to your figures. The birth-rate of France is lower than the birth-rate of England and Wales, and yet the death-rate is higher, illiteracy is higher, and the trade is lower. That seems to tend in an opposite direction to your contention?—In the case of France, I have followed the death-rate for many years, but there comes a moment when the death-rate reaches a figure per thousand which is a natural figure for that country. For instance, if in the West Indies or in Africa you could work out the natural figure for these places, nothing would reduce it. I suggest that is what has happened in France.

31. What about illiteracy?—The difference is so small. The figures were taken on recruiting. It also ignores the fact that there is more child labour and half-time in France than in England.

32. That means that a low birth-rate may be accompanied by unfavourable conditions which would tend towards illiteracy?—Yes.

33. Dr. Saleeby. You spoke about the natural death-rate of France. Do you think that has reached a point where the death-rate is normal? You referred to the death-rate as being a natural figure, and you did not think anything you did would reduce it?—People have got to die in the end.

34. Are you not aware that when a thing like malaria and fever is eliminated the death-rate becomes unrecognisable in places?—Yes, I accept that. What I said was that France might, or might not, have obtained a normal death-rate; just as in the West Indies you might have another figure which would be the normal rate there.

35. Does everybody die of old age in France, or is it one per cent. or one in a thousand?—I have made no suggestion.

36. I hope you are not correct in saying that the present death-rate is the natural one, and that it would not be reduced if tuberculosis were eliminated?—I am quite sure it would be reduced.

37. Sir Rider Haggard. Is the ultimate object of your propaganda the extinction of the human race?—No, but a reduction of its encouragement.

38. These things are progressive, and what one generation would not consider excessive as population, another generation, in whom these lessons have been inculcated, would consider excessive, so that we should always get a progressive diminution, until you get a negative result.—I don't think that follows. I think the parental instinct, which is partly like that of having pets in the house, will always operate to a certain extent.

39. You think the natural love of pets will prevent the extinction of the human race?—One has a child as one has a puppy rather.

40. I suggest to you that such things are progressive, and such things we have seen within the limits of our own lifetime; for whereas in our youth things which are talked of commonly now were not talked of then, and the general result was seen in the thousands of only sons who were killed in the late War. I suggest that that tendency, if encouraged, will increase, and that if it increases it will at any rate end in the extinction of certain portions of the human race.—I shall not believe that until it happens.

41. In face of the fact that we have an enormous Empire,

and that we at present hold it with only sixty millions of white people, do you still seriously urge upon the population of this country that they should follow your suggestions?—This country held on to the British Empire when it was a much smaller country than now.

42. The British Empire, when it was held on to by a smaller country, was infinitely smaller than it is now?—The British Empire has not increased noticeably since 1902.

43. I think within the last year it has increased by five hundred thousand square miles; how can we say that it has not increased?—I do not think that is a sufficient inducement.

44. Do you mean that the Empire should be abandoned?—That does not follow.

45. If the Empire is not to be held or abandoned, what is to happen to it?—I have not suggested that the Empire should not be held. I have suggested the control of births. I have suggested that the Empire has been held by a population much smaller than to-day.

46. We will submit to you that if the birth-rate does not continue, the Empire cannot continue.—I do not think that is the case, because the real power nowadays is mechanical power. It is not a question of men, but a question of machines. It is a question of machine-guns and tanks rather than of men.

47. DR. SCHOFIELD. Do you seriously suggest that illiteracy is the result of the high birth-rate?—I suggest it is a coincidence.

48. Should the mother who is to bring up the future race be called a breeding animal, however many children she has got?—Yes.

49. Well, I maintain that she discharges functions which no breeding animal could ever discharge.—It is not for me to ask a question of the Commission, but I do not quite understand that the mother of six or seven children is something different from a breeding animal.

50. Why did you call her that?—She has become mainly that.

51. Do you agree, in face of Sir Rider Haggard's questions, that the only possible advantage of a high birth-rate is to supply sufficient cannon fodder? Is that the only advantage you can see—that there is no advantage in supplying more British men for the extension and support of the Empire?—I have no care for the abstract idea of Empire, but much care for its peoples.

52. DR. ROUTH. In the first paragraph you say a high

birth-rate is normally accompanied by a high death-rate. What do you say of the last year, when we had a low birth-rate and a high death-rate?—I should call it an abnormal war year.

53. As regards the dissemination and giving popular knowledge of contraceptives, are you not aware that the use of contraceptives as a general routine process is very harmful to both sexes?—I know there is a lot of discussion on that, and there is a debate in the medical profession, but those who have experienced them know that if there are evils they are not greater than those of an unrestricted birth-rate.

54. MRS. CLAY. Does Mr. George say anything else about the growing value placed on human life except the supply of cannon fodder at this awful period of our history?—I do not see anything else, but if it is indicated I may see it.

55. Does he not see that there is something else arising instead of force? The brotherhood of man is growing. We do not want men for force, but for brotherhood.—I have never heard anybody say so before.

56. DR. SALEEBY. My father happened to be an Assyrian Christian, as the name indicates, and his country had for centuries been accursed by the Turk. When I was lecturing on infant mortality a lady said her son was Governor of Jerusalem, and she had just been there, and the cry there was, "Send us more of your young Englishmen"—not for peace and safety, but for protection against the domination they had suffered through centuries. That is a reason for you.—I do not think it is enough to put up the birth-rate several points for that.

57. SIR E. BRABROOK. What do you call a large family?—What I call a normal family is 2·5 children.

58. That does not provide for the renewal of the race.—It is about sufficient.

It should be three or four, surely.

DR. SALEEBY. That means no deaths until maturity.

59. SIR E. BRABROOK. You would have to reduce your death-rate pretty considerably. Just one word more with regard to the function of the woman. Is it not common knowledge that some of the noblest women in the world have been the mothers of large families, have brought up those families and educated them, and whom it would be disparaging in the utmost possible degree to describe as mere breeding animals? I will give just one very familiar instance known to everybody, Susannah Wesley, the mother of the two Wesleys. They were a very large family, fifteen or

sixteen of them, and at any rate two of the youngest were John and Charles Wesley, and the whole family was educated by the mother.—I am speaking generally but particularly of the poor. It is general knowledge, I think, that the more children there are the more the mother is brutalised.

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